Inventory of Native and Non-native Vegetation on John Muir National Historic Site, Eugene O'Neill National Historic Site, and Port Chicago National Monument

Spring 2002

Written by: Eric P. B. Jepsen Andrew G. Murdock

In Cooperation with: PRBO Conservation Science

Table of Contents

<u>INTRODUCTION</u>	3
SURVEY METHODS	4
BOTANICAL SURVEY RESULTS	5
VEGETATION TYPES	7
Grassland:	
Blue Oak Woodland:	
Mixed Evergreen Forest:	9
<u>Chaparral:</u>	
<u>Riparian:</u>	
Brackish Marsh:	
<u>Ruderal:</u>	
Orchard:	
Garden:	
THREATENED/ENDANGERED SPECIES AND LOCALLY RARE SPECIES	
Table 1: T/E and Locally Rare Species TARGET NON-NATIVE SPECIES	
Table 2: Target Non-Native Species	
MANAGEMENT RECOMMENDATIONS	
PLANT SPECIES CHECKLIST FOR JOHN MUIR N.H.S.	26
MOUNT WANDA PROPERTY	26
SPECIES POTENTIALLY FOUND ON MOUNT WANDA	
REJECTED SPECIES FOR MT. WANDA	
HOUSE PROPERTY	
<u>Gravesite</u>	
PLANT SPECIES CHECKLIST FOR EUGENE O'NEILL N.H.S.	59
PLANT SPECIES CHECKLIST FOR PORT CHICAGO N.M.	66
PLANT SPECIES MASTER LIST	69
REFERENCES	186

Introduction

For any given season, if you were to spend a few days each week walking the hills of a given area you would begin to intimately know and appreciate the species present in that ecosystem. Over time, you would see succession of plant populations and blooming periods, which continually augment and change the character of the plant communities; you would witness the amazing spurts of growth and productivity following a nurturing spring rain. And just when you were sure you had seen everything there was to see on that hillside or deep ravine, you would round a corner and see in a shaft of sunlight, the brilliant gleam of some vibrant annual shaking off the morning dew and summoning the insects of its choosing to come and partake of the glories of spring.

The following report is a dynamic representation of such an ecosystem spanning several different habitat types. The included lists represent the species richness of the study sites, based on over 500 combined hours spent in the field. Yet, no matter how thorough the investigation, this work will fall short in showing every species present in this ever-changing environment. There are many plant species reported for parts of the area surveyed that were absent (or simply unseen) in 2002. This may have been the case with the endangered Mount Diablo fairy lantern (*Calochortus pulchellus*), or the inconspicuous Naked broom-rape (*Orobanche uniflora*), but are more than likely still present on Mt. Wanda. On the other hand, we found some new species, too. This includes the Foothill larkspur (*Delphinium hesperium* ssp. *hesperium*), which has not been reported in the area since John Muir noted it in his journal around the beginning of the 20th century!

The purpose of this study was to document the plant species richness of John Muir National Historic Site (JOMU) in Martinez, California, Eugene O'Neill National Historic Site (EUON) in Danville, California, and Port Chicago National Monument (POCH), which is located on the Naval Weapons Station in Concord, California. JOMU includes three separate sub-properties: John Muir's gravesite, house property, and the 330-acre Mt. Wanda property formerly owned by Muir and his family. Comprehensive plant species lists were compiled for all three sites, with locational data and flowering

time included in as much detail as possible. Habitat types were determined based on established concepts of California plant habitats, and we describe them in detail below with respect to the three properties. This study aims to develop and promote a strong understanding of the plant resources to aid in the creation of management plans for the National Park Service properties in the East Bay.

Survey Methods

Vegetation surveys were performed from February through September of 2002. An initial assessment of all existing data for the Mt. Wanda site was performed. This included the 1992 survey of Mt. Wanda by Hunter et al. and various official and unofficial lists compiled by the staff at JOMU. From these data a master list of all previous reports of plant species was created to aid in the survey process. Over the course of the season, this list was then updated with additional species and locational information. For all other sites, data lists were compiled as species were found.

Areas were systematically surveyed on a regular basis. Plant identification was performed on site to prevent error caused by drying and crushing in transport. This also allowed us to examine the entire plant while fresh and prevent the need for picking rare and endangered plants. All taxonomy and nomenclature is based on the Jepson Manual for Higher Plants in California (Hickman et al. 1993). Locational data and flowering time were determined by direct field observations. Difficult species determinations were aided by use of the University and Jepson Herbaria at the University of California at Berkeley, and the CalFlora Database (www.calflora.org). A digital camera (Nikon CoolPix 775) was used in the field to capture representative photos of vegetation types and rare plants. These images are included on a CD provided to the NPS. GPS data also was recorded in the field for locations of rare plant and target non-native species. From these data, a series of maps have been produced which represent the collected data (Appendices 1-4).

Some time was spent relocating a series of vegetation transects that had been installed as part of the 1993 study. All of the grassland transects and some of the woodland transects were relocated and mapped with a Garmin GPS unit and monumented

with new flagging. These transects have also been mapped for future relocation and remeasurement (Appendix 5).

Finally, the many horticultural varieties located on the JOMU house property were incorporated into the survey list. For this we consulted and relied heavily upon the extensive knowledge of the JOMU maintenance staff and their records of both historic and recent plantings. It should be noted that the number of horticultural species found at JOMU is continually fluctuating as the maintenance staff augments and develops the gardens of the historic site.

Botanical Survey Results

Vegetation surveys detected 357 plant species on all 3 properties, including both native and introduced species. On Mt. Wanda alone, we found 280 species representing 64 families. At the John Muir House site 221 species were documented representing 76 families, (many of those under cultivation). The John Muir Grave site had 85 species from 45 different families. At EUON, 172 species were found from 55 families. At POCH we found only 55 species from 20 families, which is not surprising considering the extremely small piece of land on which the monument sits. Overall, 55.0% of the plants we found were native to California. Forty-eight of the introduced species found are listed as noxious weeds by either the California Exotic Pest Plant Council (CalEPPC), or the California Department of Food and Agriculture (CDFA).

While this survey thoroughly documents all species observed during the growing season of 2002, there are most certainly species that remain to be discovered, especially on the relatively large Mt. Wanda property. For Mt. Wanda, it can be said with some certainty that following a wildfire (or controlled burn) native species now dormant in the seed bank could, at least temporarily, reestablish some of the natural populations that were present before grazing and the onslaught of introduced grasses. Since grazing was stopped on Mt. Wanda in 1992, several species not found during the study conducted by Hunter et al. in 1992 have been reestablished, such as Red maids (*Calandrinia ciliata*), Slender phlox (*Phlox gracilis*), Bicolored linanthus (*Linanthus bicolor*), and Cream sacs (*Castilleja rubicundula* ssp. *lithospermoides*). The effects of intensive grazing can still

be observed, however, both in the contour of the landscape and in the abundance of invasive plants. The majority of native species were found in more selective habitats (e.g., mixed evergreen forest, chaparral, and blue oak woodland), while the non-native species tended to occur in disturbed areas and open grassland, and thoroughly dominated these habitats.

Vegetation Types

Prior to this survey, adequate descriptions of vegetation types for Mt. Wanda were already available in Hunter et al. These types include grassland, blue oak woodland, mixed evergreen forest, chaparral and ruderal. Initial surveys were performed to verify this assessment. These vegetation types also were used to describe other areas at JOMU, EUON, and POCH, while new categories were designated for vegetation types not previously surveyed. These other vegetation types (riparian, brackish marsh, orchard and garden) are described below.

Grassland:

This vegetation type consists of mostly unshaded areas dominated by introduced grass and thistle species. It typically occurs in areas on top of Mt. Wanda as well as south-facing hillsides. Dominant species include: Wild oats (*Avena fatua*), Black mustard (*Brassica nigra*), Rip-gut brome (*Bromus diandrus*), Soft chess (*Bromus hordeacus*), Italian ryegrass (*Lolium multiflorum*), Foxtail barley (*Hordeum murinum ssp. leporinum*), Italian thistle (*Carduus pycnocephalus*), and Yellow star-thistle (*Centaurea solstitalis*). Other significant species include Common fiddleneck (*Amsinckia menziesii* var. *intermedia*), Milkthistle (*Silybum marianum*), Cut-leaved geranium (*Geranium dissectum*), Crane's bill geranium (*Geranium molle*), various Filaree (*Erodium* spp.), Field bindweed (*Convolvulus arvensis*), and Spring vetch (*Vicia sativa*). This vegetation type covers roughly 117 acres of Mt. Wanda (Hunter et al. 1993), and is also present to a lesser degree at EUON.





Blue Oak Woodland:

This vegetation type is represented by a diverse assemblage of trees and herbaceous plants and has a distinct well-developed overstory and understory. Blue Oak Woodland typically occurs in north-facing areas of Mt. Wanda and in upper portions of drainages. The dominant species in the overstory is Blue oak (*Quercus douglasii*), with Valley oak (*Quercus lobata*), Black oak (*Quercus kellogii*), and California buckeye (*Aesculus californica*), also well represented. Common understory species include Poison oak (*Toxicodendron diversilobum*), Ripgut brome (*Bromus diandrus*), Pacific snakeroot (*Sanicula crassicaulis*), Spring vetch (*Vicia sativa*), Canyon nemophila (*Nemophila hetrophylla*), Chickweed (*Stellaria media*), Miners' lettuce (*Claytonia perfoliata*), Goose grass (*Galium aparine*), Italian thistle (*Carduus pycnocephalus*), Hedgehog dogtail (*Cynosorus echinatus*), Wild oats (*Avena fatua*), and Field hedge parsley (*Torilis arvensis*). This vegetation type covers roughly 155 acres of Mt. Wanda (Hunter et al. 1993).





Mixed Evergreen Forest:

This vegetation type consists of more dense forest than that of Blue Oak Woodland. The overstory is significantly more developed than the understory in this vegetation type. Mixed Evergreen Forest generally occurs in lower portions of drainages and at the bottom of north-facing slopes. Dominant tree species include Coast live oak (Quercus agrifolia), and California bay (Umbellularia californica), with Black oak and California buckeye also occurring frequently. Understory species include: Poison oak, Maidenhair fern (*Adiantum jordanii*), California coffeeberry (*Rhamnus californica*), Wood fern (*Dryopteris* arguta), California blackberry (*Rubus ursinus*), Hedge nettle (Stachys ajugoides var. rigida), and Torrey melic (Melica torreyana). This vegetation type covers roughly 55 acres of Mt. Wanda, (Hunter et al. 1993), and includes the few riparian zones found on the mountain. This vegetation type is found at Mt. Wanda and is a significant component of the landscape of EUON as well. The forested area of EUON also contains a steep slide region with a seep that keeps the ground wet year round. Because of the unique nature of this spot, many interesting plants such as Yerba buena (Satureja douglasii), Giant horsetail (Equisetum telmateia ssp. braunii), and Soloman's seal (*Smilacina stellata*) grow here and nowhere else on the property.





Chaparral:

This vegetation type consists of dry scrub with some herb and tree components. Chaparral is only found in isolated patches on the north side of Mt. Wanda. Dominant species include Chamise (*Adenostoma fasciculata*), California sagebrush (*Artemisia californica*), Toyon (*Heteromeles arbutifolia*), Sticky monkeyflower (*Mimulus aurantiacus*), Coyote mint (*Monardella villosa* ssp. *villosa*), and Deer weed (*Lotus scoparius*). Other significant species include: Indian paintbrush (*Castilleja affinis*), Wooly owl's clover (*Castilleja foliolosa*), Hop tree (*Ptelea crenulata*), Poison oak, Coast live oak, and Coyote brush (*Baccharis pilularis*). This vegetation type covers roughly two acres of Mt. Wanda (Hunter et al. 1993).





Riparian:

At Mount Wanda and EUON, riparian areas occur within the Mixed Evergreen Forest vegetation type. However, at the JOMU Gravesite and House properties, the riparian areas are significantly different in species composition and are a distinct vegetation type. Riparian areas consist of stream banks, bordering areas, and the streams themselves. The plants found in these areas are a mix of tree, shrub and herbaceous species. Dominant plants include California black walnut (*Juglans californica* var. *hindsii*), California sycamore (*Platanus californicus*), Canary grass (*Phalaris aquatica*), Giant reed (*Arundo donax*), Red willow (*Salix laevigata*), Arroyo willow (*Salix lasiolepis*), Periwinkle (*Vinca major*), Himalaya berry (*Rubus discolor*), and Poison oak.





Brackish Marsh:

This area occurs only at POCH and consists of a few short stretches of shoreline free rubble and debris that are subject to regular tidal fluctuations. This unique vegetation type harbors many different species found nowhere else in this survey. Dominant plants include Three square (*Scirpus americanus*), Low clubrush (*Scirpus cernuus*), California bulrush (*Scirpus californicus*), Marsh gumplant (*Grindelia stricta* var. *angustifolia*), Wire rush (*Juncus balticus*), and Perrenial pepperweed (*Lepidium latifolium*), on the higher margins of the zone.





Ruderal:

This is more of a habitat than a true vegetation type, but a significant number of plants occur in these areas, and sometimes do not occur elsewhere. Ruderal areas are disturbed places that include roads, trails, road cuts, and other areas created and consistently impacted by human use. This also includes areas that are regularly disked or mowed as part of a fire management regime. These ruderal areas favor fast growing annuals and plants that can withstand general disturbance and rapid desiccation of surrounding soil. Significant plants include Little hop clover (*Trifolium dubium*), Perrenial pepperweed, Bellardia (*Bellardia trixago*), Pineapple weed (*Chamomilla suaveolens*), Prickly sow thistle (*Sonchus asper*), Bristley ox-tongue (*Picris echioides*), and Filaree.





Orchard:

At the JOMU Gravesite and House properties, these areas are agriculturally developed, maintained, and disked historic fruit orchards. The plants found in these areas, other than those cultivated, consist entirely of weeds and other herbaceous introduced plants. Dominant plants include Foxtail, Bermuda grass (*Cynodon dactylon*), Cut leaved geranium, and Filaree.

On Mt. Wanda there are two significant locations of remnant orchards. One is a small set of Apricot trees (*Prunus armeniaca*), on the southeast side of Mt. Wanda, which is mostly given over to grassland at the time of this writing. The other is a large Olive orchard (*Olea europea*) at the top of the grassland hillside south of the Strain ranch property. These olives should be of some concern to the park as the CalEPPC considers them a weedy species, and there is already extensive secondary growth of olive saplings spreading into the mixed evergreen forest type adjacent to the orchard. Neither of these orchards is currently maintained.

At EUON, there are both newly planted and remnant orchards. The new orchards are maintained and disked, while some of the older orchards are left untouched, which is resulting in establishment of different dominant species. Dominant plants in disked areas include Common groundsel (*Senecio vulgaris*), Field bindweed, Puncturevine (*Tribulus terrestris*), Chickweed, Redmaids, Scarlet pimpernel (*Anagallis arvensis*), and Filaree species. Dominant plants in undisked areas are similar to the grassland described above for JOMU, with addition of Spring vetch, Hedgehog dogtail, and Canary grass.





Garden:

The garden type is a conglomerate type that is not so much dominated by single species of plants as it is by the unmistakable human aesthetic influence. This habitat is marked by well-groomed hedges surrounding regularly watered areas, usually within the proximity of a structure or a parking area. These areas tend to be mostly non-native individuals that have been carefully selected for the site, as well as a scattering of weed species that do well at growing between the propagated plants. There are often open patches of soil found within and around the garden plot. This habitat was found around the historic Muir house at JOMU and the Tao house at EUON.





Threatened/Endangered Species and Locally Rare Species

Mt. Wanda is home to several threatened and endangered species, most notably the Mt. Diablo sunflower (*Helianthella castanea*) which is currently listed as a "species of concern" by the U.S. Fish and Wildlife Service (USFWS). California black walnut (*Juglans californica* ssp. *hindsii*), which shares the "species of concern" status, is actually quite abundant at both JOMU and EUON. This is partially due to its existence in its natural riparian habitat as well as in relict orchard areas, where it was used extensively as rootstock for English walnut (*Juglans* regia). In these orchard areas many California black walnut trees have grown up and flourished long after their English walnut grafts have died.

All three properties contain locally rare species (based on Lake's *Unusual and Significant Plants* list published by the California Native Plant Society and the CNPS Rare Plants Inventory), all of which are listed below. GPS coordinates were recorded for several species, (see map in Appendix 1 for exact locational data).



Photo: Calochortus venustus Butterfly mariposa lily

Table 1: T/E and Locally Rare Species

Latin Name	Common Name	CNPS	Federal	Property
		Status	Status	
Arbutus menziesii	Madrone	Uw		EUON
Asclepias cordifolia	Heart-leafed milkweed	Ua1		JOMU: Wanda
Calochortus albus	White globe lily	Uw		EUON
Calochortus venustus	Butterfly mariposa lily	Uw		JOMU: Wanda
Carex aquatilis var. dives	Sitka sedge	Ua2		JOMU: House
Castilleja rubicundula ssp. lithospermoides	Cream sacs	Ub		JOMU: Wanda
Clarkia affinis	Chaparral clarkia	Uw		JOMU: Wanda; EUON
Collinsia sparsiflora var. sparsiflora	Blue-eyed mary	Ub		JOMU: Wanda
Deschampsia cespitosa ssp. holciformis	Tufted hairgrass	Ub		POCH
Deschampsia elongata	Slender hairgrass	Uw		EUON
Dicentra formosa	Bleeding heart	Ua1		JOMU: Grave
Epilobium ciliatum ssp. ciliatum	Willow herb	Uw		JOMU: House; EUON
Equisetum telmateia ssp. braunii	Giant horsetail	Uw		JOMU: Grave; EUON
Grindelia stricta var. angustifolia	Marsh gum plant	List 4		РОСН
Helianthella castanea	Mt. Diablo sunflower	List 1B, RED-223	Species of Concern	JOMU: Wanda
Jaumea carnosa	Fleshy jaumea	Uw		РОСН
Juglans californica ssp. hindsii	California black walnut	List 1B, RED-333	Species of Concern	JOMU: Wanda, House, Grave; EUON
Linaria canadensis	Blue toadflax	Ub		JOMU: Wanda
Phoradendron	Big-leaf mistletoe	Ub		JOMU: Wanda,
macrophyllum				House; EUON
Platanus racemosa	California sycamore	Ua2		JOMU: Grave
Plectritis brachystemon	Short-spurred plectritis	Ua2		JOMU: Wanda

Potentilla anserina	Pacific silverweed	Ua2	POCH
ssp. pacifica			
Ptelea crenulata	Hop tree	Ub	JOMU: Wanda
Ribes californicum	Hillside gooseberry	Uw	JOMU: Wanda
var. californicum			
Rupertia physodes	California tea	Uw	JOMU: Wanda
Scirpus cernuus	Low clubrush	Uw	POCH
Scirpus maritimus	Prairie bulrush	Uw	JOMU: House
Scutellaria tuberosa	Skullcap	Uw	JOMU: Wanda
Trillium	Giant trillium	Uw	EUON
chloropetalum			

Notes:

Federal Status:

Species of Concern

Plant species sensitive species that have not been listed, proposed for listing nor placed in candidate status. Species of concern is an informal term used by some but not all U.S. Fish & Wildlife Service offices. Species of concern receive no legal protection and the use of the term does not necessarily mean that the species will eventually be proposed for listing as a threatened or endangered species.

CNPS Rarity Lists:

- List 1A = Plants Presumed Extinct in California;
- List 1B = Plants Rare, Threatened, or Endangered in California and Elsewhere;
- List 2 = Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere;
- List 3 = Plants About Which We Need More Information A Review List;
- List 4 = Plants of Limited Distribution A Watch List

CNPS Rarity-Endangerment-Distribution, (R-E-D), Code:

R - Rarity

- 1 = Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time.
- 2 = Distributed in a limited number of occurrences, occasionally more if each occurrence is small.
- 3 = Distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported.

E = Endangerment

- 1 = Not endangered
- 2 =Endangered in a portion of its range
- 3 = Endangered throughout its range

D - Distribution

- 1 = More or less widespread outside California
- 2 = Rare outside California
- 3 = Endemic to California

Lake's Unusual and Significant Plants list, (for Alameda and Contra Costa Counties):

- Ua1 = 2 known localities or fewer
- Ua2 = More than 2 localities, but seriously threatened
- Ub = 3-5 localities, threatened but not as seriously
- Uw = Lake's watch list

Target Non-Native Species

Both the CalEPPC and the CDFA actively maintain lists of species considered invasive weeds. Each organization has a different set of standards to determine what qualifies as a weed. The CalEPPC is mostly concerned with invasive plants of wild areas, while the CDFA is more concerned with weed plants of farm and livestock areas. Because the three properties covered in this report are comprised of both wild regions and managed land, we have chosen to use both lists for determining which plants would be included as weed species, be they native or non-native. There are 47 species on the three properties, which are listed weed species or are under consideration to be rated. Also included in this report is a list of invasive weed species not currently on any official lists, which may be taken into consideration on future lists.

GPS coordinates for weed populations of relatively limited distribution, but with high potential to spread, were taken during the course of this study. These species are Tree of Heaven, (*Ailanthus altissima*), Giant reed, Black mustard, Purple star-thistle (*Centaurea calcytrapa*), Bull thistle (*Cirsium vulgare*), Franchet Cotoneaster (*Cotoneaster franchetii*), Poison hemlock (*Conium maculatum*), Artichoke thistle (*Cynara cardunculus*), Australian Blue gum (*Eucalyptus globulus*), Oblong spurge (*Euphorbia oblongata*), Fennel (*Foeniculum vulgare*), French broom (*Genista monspessulana*), Hoary mustard (*Hirschfeldia incana*), Perrenial pepperweed, Canary grass, Himalaya berry, Milk thistle, Perrywinkle and Spiny cocklebur (*Xanthium spinosum*). Many of the weeds of highest concern are too widespread to realistically collect useful GPS data. Please refer to maps in Appendices 2-4 for locational data.

Table 2: Target Non-Native Species

Latin Name	Common Name	CalEPPC Rating	CDFA Rating
Ailanthus altissima	Tree of heaven	A-2	
Arundo donax	Giant reed	A-1	
Avena barbata	Slender wild oat	G	
Avena fatua	Wild oat	G	
Bellardia trixago	Bellardia	В	
Brassica nigra	Black mustard	В	
Bromus diandrus	Rip-gut brome	G	
Bromus madritensis	Foxtail chess, Red	A-2	
ssp. rubens	brome		
Carduus	Italian thistle	В	NOX-C
pycnocephalus			
Carpobrotus edulis	Ice plant, Sea fig	A-1	
Centaurea calcitrapa	Purple star thistle	В	NOX-B
Centaurea melitensis	Tocalote	В	NOX-Non-Rated
Centaurea solstitalis	Yellow star thistle	A-1	NOX-C
Cirisium vulgare	Bull thistle	В	NOX-Non-Rated
Conium maculatum	Poison hemlock	В	
Convolvulus arvensis	Bindweed	?	NOX-C
Cotoneaster	Francheti	N	
franchetii	cotoneaster		
Cotoneaster lacteus	Big-leafed	A-2	
	cotoneaster		
Cynara cardunculus	Artichoke thistle	A-1	NOX-B
Cynodon dactylon	Bermuda grass		NOX-C
Eucalyptus globulus	Tasmanian blue gum	A-1	
Euphorbia lathyris	Caper spurge	N	
Euphorbia oblongata	Oblong spurge		NOX-B
Ficus carica	Fig	A-2	
Foeniculum vulgare	Fennel	A-1	
Genista	French broom	A-1	NOX-C
monspessulana			
Hedera canariensis	Algerian ivy	N	
Hedera helix	English ivy	В	
Hirschfeldia incana	Hoary mustard	N	
Lepidium latifolium	Perrenial	A-1	NOX-B
	pepperweed		
Lolium multiflorum	Italian rye grass	G	
Malvella leprosa	Alkali mallow		NOX-C
Medicago	California bur clover	?	
polymorpha			
Nerium oleander	Oleander	?	
Olea europaea	Olive	В	

Oxalis pes-caprae	Bermuda buttercup	N	
Phalaris aquatica	Harding grass	В	
Phyla nodiflora var nodiflora	Common lippia	N	
Picris echioides	Bristly ox-tongue	?	
Piptatherum miliaceum	Smilo grass	N	
Prunus cerasifera	Cherry plum	N	
Rubus discolor	Himalaya blackberry	A-1	
Salsola soda	Russian thistle	N	
Senecio vulgaris	Groundsel		NOX-Non-Rated
Silybum marianum	Milk thistle	?	
Solanum americanum	Small-flowered nightshade		NOX-Non-Rated
Vinca major	Periwinkle	В	
Tribulus terrestris	Puncturevine		NOX-C
Xanthium spinosum	Spiny cocklebur	?	
Zantedeschia aethiopica	Calla-lily	?	
αειπιοριτά			

Notes:

CalEPPC Ratings:

A-1 = Most Invasive Wildland Pest Plants, Widespread; **A-2** = Most Invasive Wildland Pest Plants, Regional

 \mathbf{B} = Wildland Pest Plants of Lesser Invasiveness; \mathbf{N} = Need More Information; \mathbf{G} = Other Annual Grasses of Concern

? = Considered But Not Listed

CDFA Ratings:

NOX-C = Extremely Widespread (Containment Efforts Not Recommended);

NOX-B = Widespread (Potentially Containable);

NOX-Non-rated = Weeds Without an Established Rating



Photo: Silybum marianum Milk thistle

Management Recommendations

This survey covered a wide variety of habitat types and communities that require very different management regimes that need to be tailored for each specific area. The north side of Mt. Wanda and the east side of EUON both have large areas of "wild lands" that experience a small amount of human impact as a function of their inaccessibility. For these areas the most worthwhile management practice should probably be maintaining limited access. These areas contain some of the richest species diversity of the areas surveyed, and also were home to a number of interesting animals. During our time in the field we found several species of snake, a few active honeybee hives, many different bird species, footprints and scat a number of large mammals, and even the den of a Red Fox. One noteworthy find was the nest of a pair of Turkey Vultures, (replete with one healthy chick), far from the meandering wildflower path, in one of the most distant, unvisited corners of the park. Turkey Vultures are shy creatures, choosing isolated places in the chaparral for their nesting area. Very rarely are these nesting areas ever found. The existence of this nest is a testament to the undisturbed nature of the area.

On the north side of Mt. Wanda we found a number of diverse plant communities, with isolated "hot spots" of diversity. In this area there were enough minor variations in degree of slope, hillside orientation, and composition of overstory density, which created a very diverse set of microclimates in which many different species of plant thrived, thus making areas of the North-facing Blue Oak Woodland by far the most botanically interesting. Future management should take this into account, and management should favor the preservation of that habitat. It was also in these north side areas where the Mt. Diablo sunflower was found, as well as the locally rare Heart-leafed milkweed. The sunflower was located usually along the ecotone between the Chaparral and the Blue Oak Woodland and was restricted to small, isolated populations of ten to twenty plants. The milkweed was represented by only a handful of individual plants in two isolated locations. The continued existence of the Chaparral and Blue Oak Woodland types seems vital to the existence of these rare plants.

The proper management of the Blue Oak Woodland is especially important as the presence of the *Phytopthora* species responsible for Sudden Oak Death could spell doom

for this entire plant community, including those rare species mentioned above. There are also many century-old oak trees spread out over Mt. Wanda, that represent in themselves the vitality of the plant community. The loss of these trees would be nothing less than tragedy.

The top and southern portions of Mt. Wanda are a very different story. Most open grassland areas were dominated by non-native, annual grasses. These areas were also densely populated by patches of Yellow star thistle, Italian thistle, Milk thistle, and Black mustard. Management of the grassland areas of Mt. Wanda poses a significant challenge. Perhaps this is the opportunity the National Park Service has been waiting for to test the usefulness of a new, intensive management regime, (e.g. proscribed burn combined with grazing and selective weeding). While there is certainly a huge issue of liability and good neighbor relations, a fire regime may be the answer to cutting down on the non-native seedbed. As it stands now, there are only a few portions of the grassland areas on Mt. Wanda that are not dominated by aggressive non-natives.

In general, all disturbed sites were dominated by non-natives as well. One such site was the pasture adjacent to the entrance to the Strain property. This area was dominated by a combination of Purple star thistle, Artichoke thistle, Perrenial pepperweed, Bull thistle, and Italian rye grass. Well-timed, intense weeding operations would probably do very well at controlling and eradicating these populations. In the case of the Purple star thistle, and the Perrenial pepperweed, this is the only location where these plants exist in the park and eradication would be easily attained through intensive weeding.

On the southeast side of Mt. Wanda are the remnants of Apricot trees, dating back to the time of John Muir. While it may be in keeping with the doctrine of the park to reestablish and maintain these trees as part of the historically significant agriculture of Muir's time, the amount of water needed to maintain these trees in a healthy state may be beyond the park's resources. As they are now, there are only a few trees holding on tenuously to life on that otherwise parched and arid hillside.

Further south, on the hillside across the drainage of the Strain ranch is the Olive orchard mentioned earlier in this report. This orchard should be of serious concern for the park as it is already spreading down into the forest below it and has a great potential to out-compete all other plants in that area. The effort needed to thwart this spread is not huge as the olive seedlings and saplings are easily identified and can be hand pulled in about an afternoon's work by a weed abatement crew.

On the north end of the park is another simple afternoon of weed abatement that will make a permanent impact on the park. There is a relatively small patch of French broom that could be eradicated in a day and also a single patch of Himalayan blackberry that also could be eradicated in a day.

A final area of concern for Mt. Wanda should be around the park boundaries. Tree of heaven is a major problem along the Eastern border of the park and there are a few trees along the Northern border. The eradication of this tree is probably never completely attainable as they grow abundantly in the surrounding neighborhood. But after the current aggressive removal project, the containment of the spread of tree of heaven may be a fairly small annual project for the park.

As for the orchard areas that are at the John Muir House and Gravesite as well as EUON, the current practice of disking has both advantages and disadvantages as a management practice. While the major benefit of low fuel loading, and thus low fire danger is a major benefit from disking, the constant disturbance is creating an environment in which quick-growing annuals and weed species proliferate. On the whole, most of the species found in these areas are "benign" weeds in that they don't seem to spread into other areas. There are however a few problem species that are doing very well by this practice. The most offensive of these weeds is Puncture vine (*Tribulus terrestris*). This is an easily recognizable plant in disturbed areas that produces an abundance of hard, spiny, tire-popping seedpods. It may be this weed can be controlled manually or by poison, but at present it seems to be growing unchecked at all sites.

The POCH site was the picture of an edge community. On the side of the Carquinez Straits there was a strong, (though tiny), wetland community composed of

several interesting species that were adapted to the tidal environment. Then, just two meters from the water was the beginning of ruderal areas, where invasive weed species dominated. At the time of this writing POCH is less than one hectare in size, but is abutted by hundreds of hectares of military land, that, if acquired by the Parks Service, would become both a tremendous asset in the form of wetlands and a major restoration project. The two dominant weeds found on the POCH site were Perrenial pepperweed and Fennel. Both of these species extended over vast areas all around POCH and any restoration project would have to devote many, many hours to the removal of these species. Just off of the site were many massive patches of Iceplant, which also should become the focus of a Parks eradication project, should the National Monument property boundaries ever be extended

Asclepiadaceae

□ Ascelpias cordifolia

<u>Plant Species Checklist for John Muir N.H.S.</u> <u>Mount Wanda Property</u>

<u>LATIN NAME</u>		COMMON NAME	
Aı	naranthaceae		
	Amaranthus blitoides	Prostrate pigweed	
Aı	nacardiaceae		
	Toxicodendron diversilobum	Poison oak	
A	piaceae		
	Anthriscus caucalis	Bur-chervil	
	Conium maculatum	Poison hemlock	
	Daucus pusillus	Rattlesnake weed	
	Foeniculum vulgare	Fennel	
	Lomatium utriculatum	Bladder parsnip	
	Osmorhiza chilensis	Wood cicely	
	Perideridia kelloggii	Yampah	
	Sanicula bipinnatifida	Purple sanicle	
	Sanicula crassicaulis	Pacific snakeroot	
	Scandix pecten-veneris	Shepherd's needle	
	Torilis arvensis	Field hedge parsley	
	Torilis nodosa	Knotted hedge parsley	
A	oocynaceae		
	Vinca major	Periwinkle	
Aı	raceae		
	Zantedeschia aethiopica	Calla-lily	
Aı	raliaceae		
	Hedera helix	English ivy	
Aristolochiaceae			
	Aristolochia californica	Dutchman's pipe	

Heart-leafed milkweed

	Asclepias fascicularis	Narrow-leafed milkweed			
As	Asteraceae				
	Achillea millefolium	Yarrow			
	Achyrachaena mollis	Blow wives			
	Agoseris grandiflora	California dandelion			
	Artemisia californica	California sagebrush			
	Artemisia douglasiana	California mugwort			
	Aster chilensis	Common california aster			
	Aster radulinus	Broad-leaved aster, Woodland aster			
	Baccharis pilularis	Coyote brush			
	Carduus pycnocephalus	Italian thistle			
	Centaurea calcitrapa	Purple star thistle			
	Centaurea melitensis	Tocalote			
	Centaurea solstitalis	Yellow star thistle			
	Chamomilla suaveolens	Pineapple weed			
	Cichorium intybus	Chicory			
	Cirisium vulgare	Bull thistle			
	Conyza bonariensis	South American horseweed			
	Conyza canadensis	Canadian horseweed			
	Cynara cardunculus	Artichoke thistle			
	Eriophyllum confertiflorum var. confertiflorum	Golden yarrow			
	Filago gallica	Fluffweed			
	Gnaphalium californicum	California everlasting			
	Gnaphalium luteo-album	Cudweed			
	Grindelia camporum var. camporum	Common gum plant			
	Helianthella castanea	Mount Diablo sunflower			
	Helianthus annuus	Sunflower			
	Holocarpha virgata ssp. virgata	Sticky tarweed			
	Hypochaeris glabra	Smooth cat's ear			
	Hypochaeris radicata	Hairy cat's ear			
	Lactuca serriola	Prickly lettuce			
	Lactuca virosa	Wild lettuce			
	Lagophylla ramosissima ssp. ramosissima	Common hareleaf			

	Madia elegans ssp. densiflora	Common tarweed		
	Madia gracilis	Slender tarweed		
	Micropus californicus var. californicus	Slender cottonweed		
	Picris echioides	Bristly ox-tongue		
	Psilocarphus tenellus var. tenellus	Woolly head		
	Senecio vulgaris	Groundsel		
	Silybum marianum	Milk thistle		
	Solidago californica	California goldenrod		
	Soliva sessilis	South American soliva		
	Sonchus asper ssp. asper	Prickly sow thistle		
	Sonchus oleraceus	Common sow thistle		
	Taraxacum officinale	Dandelion		
	Uropappus lindleyi	Silver puffs		
	Wyethia angustifolia	Narrowleaf mule ears		
	Wyethia helenoides	Grey mule ears		
	Xanthium strumarium	Cocklebur		
Bo	oraginaceae			
	Amsinckia menziesii var. intermedia	Common fiddleneck		
	Cynoglossum grande	Grand hound's tongue		
Br	rassicaceae			
	Brassica nigra	Black mustard		
	Brassica rapa	Field mustard		
	Capsella bursa-pastoris	Shepherd's purse		
	Cardamine oligosperma	Bitter cress		
	Hirschfeldia incana	Hoary mustard		
	Lepidium latifolium	Perrenial pepperweed		
	Lepidium nitidum var. nitidum	Poorman's peppergrass		
	Raphanus sativus	Wild radish		
	Sinapis arvensis	Charlock		
	Sisymbrium officinale	Hedge mustard		
	Thysanocarpus curvipes	Fringepod		
Ca	Caprifoliaceae			
	Lonicera hispidula var. vacillans	California honeysuckle		

	Sambucus mexicana	Blue elderberry
	Symphoricarpos albus var. laevigatus	Snowberry
Ca	aryophyllaceae	
	Silene gallica	Windmill pink, Common catchfly
	Spergularia rubra	Sand spurrey
	Stellaria media	Chickweed
Co	onvolvulaceae	
	Calystegia subacaulis ssp. subacaulis	Hill morning glory
	Convolvulus arvensis	Bindweed
Cı	ucurbitaceae	
	Marah fabaceus	California manroot
Dı	ryopteridaceae	
	Dryopteris arguta	Wood fern
Eł	penaceae	
	Diospyros kaki	Persimmon
Ει	ıphorbiaceae	
	Chamaesyce maculata	Spotted spurge
	Eremocarpus setigerus	Dove weed, Turkey mullein
	Euphorbia lathyris	Caper spurge
	Euphorbia oblongata	Oblong spurge
	Euphorbia spathulata	Spatulate leafed spurge
Fa	abaceae	
	Genista monspessulana	French broom
	Lathyrus latifolius	Everlasting pea
	Lathyrus vestitus var. vestitus	Hillside pea
	Lotus corniculatus	Bird's foot lotus
	Lotus humistratus	Hill lotus
	Lotus purshianus var. purshianus	Spanish lotus
	Lotus scoparius var. scoparius	Deer weed
	Lotus wrangelianus	Common trefoil
	Lupinus bicolor	Miniature lupine
	Lupinus formosus var. formosus	Summer lupine
	Lupinus microcarpus var. microcarpus	Chick lupine, Valley lupine

Grossulariaceae

	Lupinus nanus	Sky lupine, Douglas's lupine
	Lupinus succulentus	Arroyo lupine
	Medicago arabica	Spotted bur clover
	Medicago polymorpha	California bur clover
	Melilotus indica	Sour clover
	Robinia pseudo-acacia	Black locust
	Rupertia physodes	California tea
	Trifolium bifidum var. decipiens	Deceiving clover
	Trifolium dubium	Little hop clover, Shamrock
	Trifolium gracilentum var. gracilentum	Pinpoint clover
	Trifolium hirtum	Rose clover
	Trifolium incarnatum	Crimson clover
	Trifolium microcephalum	Smallhead clover
	Trifolium microdon	Valparaiso clover, Thimble clover
	Trifolium oliganthum	Fewflower clover
	Trifolium subterraneum	Subterranean trifolium
	Trifolium wildenovii	Tomcat clover
	Vicia americana var. americana	American vetch
	Vicia benghalensis	Purple vetch
	Vicia sativa ssp. nigra	Spring vetch
Fa	gaceae	
	Quercus agrifolia	Coast live oak
	Quercus douglasii	Blue oak
	Quercus kelloggii	Black oak
	Quercus lobata	Valley oak
	Quercus suber	Cork oak
G	eraniaceae	
	Erodium botrys	Long-beaked stork's bill
	Erodium cicutarium	Red-stemmed stork's bill
	Erodium moschatum	Whitestem filaree
	Geranium dissectum	Cut-leaved geranium
	Geranium molle	Crane's bill geranium

	Ribes californicum var. californicum	Hillside gooseberry
Hi	ppocastanaceae	
	Aesculus californica	California buckeye
Hy	drophyllaceae	
	Nemophila heterophylla	Canyon nemophila
Hy	pericaceae	
	Hypericum calycinum	Creeping St. John's wort
Iri	daceae	
	Sisyrinchium bellum	Blue-eyed grass
Ju	glandaceae	
	Juglans californica ssp. hindsii	California black walnut
	Juglans regia	English walnut
Ju	ncaceae	
	Juncus patens	Spreading rush
	Juncus xiphoides	Iris-leaf juncus
	Luzula comosa	Wood rush
La	miaceae	
	Lamium amplexicaule	Clasping henbit
	Monardella villosa ssp. villosa	Coyote mint
	Salvia mellifera	Black sage
	Scutellaria tuberosa	Skullcap
	Stachys ajugoides ssp. rigida	Hedge nettle
La	uraceae	
	Umbellularia californica	California bay
Lil	liaceae	
	Allium serra	Serrated onion
	Asparagus officinalis ssp. offininalis	Asparagus
	Brodiaea elegans ssp. elegans	Harvest brodiaea
	Calochortus venustus	Butterfly mariposa lily
	Chlorogalum pomeridianum var. pomeridianum	Wavy-leaved soap plant
	Dichelostemma capitatum ssp. capitatum	Blue dicks
	Dichelostemma congestum	Round tooth ookow
	Triteleia laxa	Ithuriel's spear, Wally basket

	Yucca elephantipes	Giant spineless yucca
	Zigadenus fremontii	Star lily, Death camas
M	alvaceae	
	Malva nicaeensis	Bull mallow
M	yrtaceae	
	Eucalyptus globulus	Tasmanian blue gum
O	leaceae	
	Olea europea	Olive
O	nagraceae	
	Clarkia affinis	Chaparral clarkia
	Clarkia unguiculata	Elegant clarkia
	Epilobium brachycarpum	Annual fireweed
O	xalidaceae	
	Oxalis corniculata	Wood sorrel
	Oxalis pes-caprae	Bermuda buttercup
Pa	npaveraceae	
	Eschscholzia californica	California poppy
Pł	niladelphaceae	
	Philadelphus lewisii	Mock orange
Pi	naceae	
	Pinus sp.	Horticultural varPine
Pl	antaginaceae	
	Plantago lanceolata	Lanceleaf plantain, English plantain
Po	pacaeae	
	Agrostis exarata	Spike redtop
	Aira caryophyllea	Hairgrass
	Avena barbata	Slender wild oat
	Avena fatua	Wild oat
	Briza minor	Quaking grass
	Bromus carinatus var. carinatus	California brome
	Bromus diandrus	Rip-gut brome
	Bromus hordeaceus	Soft chess
	Bromus madritensis ssp. rubens	Foxtail chess, Red brome
	Cynodon dactylon	Bermuda grass

	Cynosorus echinatus	Hedgehog dogtail			
	Dactylis glomerata	Orchard grass			
	Elymus glaucus ssp. glaucus	Blue wildrye			
	Gastridium ventricosum	Nit grass			
	Hordeum marinum ssp. gussonianum	Mouse barley			
	Hordeum murinum ssp. leporinum	Foxtail barley			
	Leymus condensatus	Giant wild rye			
	Leymus triticoides	Creeping wild rye			
	Lolium multiflorum	Italian rye grass			
	Melica californica	California melic			
	Melica torreyana	Torrey melic			
	Nasella lepida	Foothill needlegrass			
	Nasella pulchra	Purple needlegrass			
	Phalaris paradoxa	Hood canary grass			
	Poa annua	Annual bluegrass			
	Poa bulbosa	Bulbous bluegrass			
	Poa secunda ssp. secunda	One Sided bluegrass			
	Polypogon monspeliensis	Rabbit's foot grass			
	Triticum aestivum	Wheat			
	Vulpia bromoides	Brome fescue			
	Vulpia microstachys var. pauciflora	Few-flowered fescue			
	Vulpia myuros var. myuros	Rat-tail fescue			
Po	lemoniaceae				
	Linanthus bicolor	Bicolored linanthus			
	Phlox gracilis	Slender phlox			
Po	lygonaceae				
	Eriogonum nudum var. auriculatum	Nude buckwheat			
	Polygonum arenastrum	Common knotweed			
	Rumex acetosella	Sheep sorrel			
	Rumex conglomeratus	Whorled dock			
	Rumex crispus	Curly dock, Yellow dock			
	Rumex pulcher	Fiddle dock			
Po	Polypodiaceae				

	Polypodium californicum	California polypody			
Portulacaceae					
	Calandrinia ciliata	Red maids			
	Claytonia perfoliata ssp. perfoliata	Miner's lettuce			
Primulaceae					
	Anagallis arvensis	Scarlet pimpernel			
	Dodecatheon hendersonii	Shooting star			
Pt	eridaceae				
	Adiantum jordanii	Maidenhair fern			
	Pellaea andromedaefolia	Coffee fern			
	Pentagramma triangularis ssp. triangularis	Goldback fern			
Pu	ınicaceae				
	Punica granatum	Pomegranite			
Ra	nnunculaceae				
	Delphinium hesperium ssp. hesperium	Foothill larkspur			
	Ranunculus californicus	California buttercup			
	Ranunculus muricatus	Spiny buttercup			
RI	Rhamnaceae				
	Rhamnus californica ssp. californica	California coffeeberry			
Rosaceae					
	Adenostoma fasciculatum	Chamise			
	Aphanes occidentalis	Lady's mantle			
	Cotoneaster franchetii	Franchet cotoneaster			
	Heteromeles arbutifolia	Toyon			
	Holodiscus discolor	Oceanspray			
	Malus sylvestris	Apple			
	Oemleria cerasiformis	Oso berry			
	Potentilla glandulosa ssp. glandulosa	Sticky cinquefoil			
	Prunus armeniaca	Apricot			
	Prunus cerasifera	Cherry plum			
	Prunus dulcis	Almond			
	Pyracantha angustifolia	Firethorn			
	Pyrus communis	Pear			

	Pyrus cydonia	Quince
	Rosa californica	California rose
	Rosa gymnocarpa	Dwarf rose, Wood rose
	Rubus discolor	Himalaya blackerry
	Rubus ursinus	California blackberry
Rı	ıbiaceae	
	Galium aparine	Goosegrass
	Galium murale	Tiny bedstraw
	Galium porrigens var. porrigens	Bedstraw
Rı	ıtaceae	
	Ptelea crenulata	Hop tree
Sa	licaceae	
	Populus fremontii ssp. fremontii	Fremont cottonwood
	Salix laevigata	Red willow
	Salix lasiolepis	Arroyo willow
Sa	xifragaceae	
	Lithophragma affine	Common woodland star
	Lithophragma heterophyllum	Hillside woodland star
	Saxifraga californica	California saxifrage
Sc	rophulariaceae	
	Bellardia trixago	Bellardia
	Castilleja affinis ssp. affinis	Indian paintbrush
	Castilleja attenuata	Valley tassels
	Castilleja exserta ssp. exserta	Purple owl's clover
	Castilleja foliolosa	Woolly owl's clover
	Castilleja rubicundula ssp. lithospermoides	Cream sacs
	Collinsia heterophylla	Purple Chinese houses
	Collinsia sparsiflora var. sparsiflora	Blue-eyed mary
	Linaria canadensis	Blue toadflax
	Mimulus aurantiacus	Sticky monkeyflower
	Scrophularia californica ssp. californica	Figwort
	Triphysaria pusilla	Dwarf owl's-clover

	Veronica persica	Persian speedwell				
Simaroubaceae						
	Ailanthus altissima	Tree of heaven				
So	Solanaceae					
	Solanum americanum	American black nightshade				
	Solanum umbelliferum	Blue-witch nightshade				
Ta	xodiaceae					
	Sequoia sempervirens	Coast redwood				
Typhaceae						
	Typha angustifolia	Narrow-leafed cattail				
Urticaceae						
	Urtica urens	Dwarf nettle				
Valerianaceae						
	Plectritis brachystemon	Short spurred seablush				
	Plectritis ciliosa ssp. ciliosa	Long-spurred seablush				
Viscaceae						
	Phoradendron macrophyllum	Big-leafed mistletoe				
	Phoradendron villosum	Oak mistletoe				
Vitaceae						
	Vitis vinifera	Grape				
Zygophyllaceae						
	Tribulus terrestris	Puncturevine				

Species Potentially Found on Mount Wanda

The species on this list were not found during the course of our surveys in 2002. However, these species a) have been reported for Mount Wanda by reliable sources, b) are species typically known from the area, or c) are species that are unmistakable but may not have been reported in the area. Some of these are likely mis-identifications and some are quite possibly present on Mt. Wanda.

LATIN NAME

COMMON NAME

Apiaceae

Lomatium dasycarpum Lomatium

- Not observed on Mt. Wanda

Sanicula bipinnata Poison sanicle

- Not observed on Mt. Wanda

Asteraceae

Agoseris heterophylla Mountain dandelion

- Not observed on Mt. Wanda, most likely a mistaken identification of A. grandiflora

Filago californica Fluffweed

- Not observed on Mt. Wanda, (though common elsewhere), perhaps a mistaken identification of *F. gallica*

Hesperevax sparsiflora Evax

- Not observed on Mt. Wanda

Madia exigua Threadstem tarweed

- Not observed on Mt. Wanda

Microseris elegans Elegant silverpuffs

- Not observed on Mt. Wanda, possibly a mistaken identification of *Uropappus lindleyi* (formerly *Microseris lindelyi*)

Tragopogon porrifolius Salsify

- Not observed on Mt. Wanda, but unmistakeable

Brassicaceae

Arabis glabra Tower mustard

- Not observed on Mt. Wanda

Coronopus didymus Wartcress

- Not observed on Mt. Wanda

Caryophyllaceae

Cerastium glomeratum

Sticky chickweed

- Not observed on Mt. Wanda, but common elsewhere

Chenopodiaceae

Chenopodium album

Lambsquarter

- Not observed on Mt. Wanda, but common elsewhere

Cistaceae

Helianthemum scoparium

Rushrose

- Not observed on Mt. Wanda, but unmistakeable

Crassulaceae

Crassula connata

Pygmy weed

- Not observed on Mt. Wanda

Fabaceae

Trifolium ciliolatum

Ciliate clover

- Not observed on Mt. Wanda

Trifolium depauperatum

Palesack clover

- Not observed on Mt. Wanda

Fagaceae

Quercus wislizenii

Interior live oak

- Not observed on Mt. Wanda

Geraniaceae

Erodium brachycarpum

Early filaree

- Not observed on Mt. Wanda

Juncaceae

Juncus bufonius

Toad rush

- Not observed on Mt. Wanda

Lamiaceae

Pogogyne serpylloides

Pogogyne

- Not observed on Mt. Wanda, (possibly a mistaken identification of *Triphysaria pusilla*?)

Lauraceae

Persea americana

Avocado

- Not observed on Mt. Wanda

Liliaceae

Brodiaea coronaria

Brodiaea

- Not observed on Mt. Wanda, and not known from area; unlikely to be confused with other species

Calochortus pulchellus

Mt. Diablo fairy lantern

- Not observed on Mt. Wanda, and impossible to confuse with other species. Note: this species is rare and endangered in California

Orobanchaceae

Orobanche uniflora

Naked broom-rape

- Not observed on Mt. Wanda

Poaceae

Agrostis hallii

Hall's bentgrass

- Not observed on Mt. Wanda, possibly a mistaken identification of *Melica torreyana* which

looks very similar when not fully developed

Bromus laevipes

Woodland brome

- Not observed on Mt. Wanda

Poa pratensis

Kentucky bluegrass

- Not observed on Mt. Wanda

Vulpia octoflora

Six week fescue

- Not observed on Mt. Wanda

Polygonaceae

Pterostegia drymarioides

Fairy-mist

- Not observed on Mt. Wanda

Ranunculaceae

Ranunculus aquatilis

Water buttercup

- Not observed on Mt. Wanda. Original report was for var. *hispidulus*, which is not known from the area. Most likely var. *capillaceus*, if present on Mt. Wanda.

Ranunculus hebecarpus

Delicate buttercup

- Not observed on Mt. Wanda

Rubiaceae

Galium parisiense

Wall bedstraw

- Not observed on Mt. Wanda, possibly a mistaken identification of G. murale

Saxifragaceae

Lithophragma bolanderi

Bolander's woodland star

- Not observed on Mt. Wanda

Scrophulariaceae

Triphysaria eriantha ssp. eriantha

Butter-and-eggs, Johnny-tuck

- Not observed on Mt. Wanda, perhaps mistaken ID of *Castilleja rubicundula* ssp. *lithospermoides*

Solanaceae

Nicotiana glauca

Tree tobacco

- Not observed on Mt. Wanda, and not known from the area, but very difficult to confuse with anything else

Rejected Species for Mt. Wanda

The plants on this list are species have been reported for Mt. Wanda in the past, and that we can say with some confidence are not to be found on Mt. Wanda.

LATIN NAME

COMMON NAME

Aceraceae

Acer macrophyllum Bigleaf maple

Apiaceae

Lomatium caruifolium Foothill lomatium

Asteraceae

Eriophyllum lanatum Common woolly sunflower

Eriophyllum staechadifolium Seaside woolly sunflower

Hemizonia spp.Sticky tarweedMadia sativaCoast tarweed

- Presumably a mistaken identification of *Madia gracilis*

Micropus amphibolus Mt. Diablo cottonweed

- All Micropus present on Mt. Wanda appears to be M. californicus var. californicus

Wyethia glabra Broadleaf mule ears

- All *Wyethia* present on Mt. Wanda appears to be either *W. angustifolia* or *W. helenoides*. *W. glabra* is not known from this area.

Boraginaceae

Amsinckia eastwoodiae

Valley fiddleneck

- All Amsinckia present on Mt. Wanda appears to be A. menziesii var. intermedi.

Brassicaceae

Cardamine californica

Milk maids

- All *Cardamine* present on Mt. Wanda appears to be *C. oligosperma*

Lepidium campestre Poorman's peppergrass

Cupressaceae

Cupressus sp. Cypress

- The Cypress presumably referred to is just off of the Mt. Wanda property.

Ericaceae

Arbutus menziesii

Madrone

Fabaceae

Cytisus scoparius Scotch broom

- Presumably a mistaken identification of Genista monspessulana

Trifolium aureum Hop clover

- Not known from the area

Trifolium fucatum Cow clover, Bull clover

Trifolium wormskjoldii Cow clover

Fagaceae

Quercus dumosa Scrub oak

Hydrophyllaceae

Nemophila maculata Fivespot

Nemophila menziesii Baby blue-eyes

Lamiaceae

Monardella odoratissima Mountain monardella

- Not known from the area

Liliaceae

Calochortus superbus Superb mariposa lily

- Presumably a mistaken identification of *C. venustus*

Onagraceae

Clarkia amoena

Clarkia gracilis* Farewell to spring

- Not known from the area

Clarkia purpurea ssp. quadrivulnera Winecup clarkia

- See extensive explanation under *Clarkia affinis* on the main species list

Pinaceae

Pinus coulteri Coulter pine

- Not present on Mt. Wanda, and not known from the area. There are several planted pines just off the property near the Cypress mentioned above.

Poaceae

Lamarckia aurea Goldentop

- Presumably a mistaken identification of *Cynosorus echinatus*

Panicum hillmannii Panic grass

- Not known from the area

Phalaris canariensis

Canary grass

- Presumably a mistaken identification of *P. paradoxa*

Sorghum halapense

Johnson grass

- Not known from the area

Polygonaceae

Eriogonum latifolium

Buckwheat

- Presumably a mistaken identification of Eriogonum nudum var. auriculatum

Rosaceae

Malus floribunda

Showy crabapple

- Presumably a mistaken identification of Pyrus cydonia

Prunus avium

Sweet cherry

- From notes in the 1992 Hunter et al. study, it is clear that this was a mistaken identification of *P. cerasifera*

Potentilla rivalis

Cinquefoil

- Not known from the area

Salicaceae

Salix lasiandra

Yellow willow

Solanum xantii

Nightshade

- Presumably a mistaken identification of S. umbelliferum

<u>Plant Species Checklist for John Muir N.H.S. – House Property</u>

<u>LATIN NAME</u>	COMMON NAME	
A		
Acanthaceae	D 2 1 1	
* Acanthus mollis*	Bear's breach	
Agavaceae		
□ Agave americana*	Century plant	
Amaranthaceae		
□ Amaranthus albus	Tumbleweed	
 Amaranthus blitoides 	Prostrate pigweed	
□ Amaranthus retroflexus	Rough pigweed	
Amaryllidaceae		
□ Agapanthus orientalis*	Lily of the nile	
□ Amaryllis belladonna*	Naked lady	
□ Narcissus sp.*	Daffodil, Narcissus	
Anacardiaceae		
□ Rhus ovata*	Sugar bush	
□ Schinus molle*	Peruvian peppertree	
Toxicodendron diversilobum	Poison oak	
Apiaceae		
Anthriscus caucalis	Bur-chevril	
Conium maculatum	Poison hemlock	
Foeniculum vulgare	Fennel	
□ Torilis arvensis	Field hedge parsley	
□ Torilis nodosa	Knotted hedge parsley	
Apocynaceae		
□ Trachelospermum jasminoides*	Star jasmine	
□ Vinca major	Periwinkle	
Araceae		
□ Alocasia macrorrhiza*	Elephant's ear	
□ Monstera deliciosa*	Split leaf philodendron	

Zantedeschia aethiopica*	Calla lily
Araliaceae	
□ Hedera canariensis*	Algerian ivy
□ Hedera helix*	English ivy
Asteraceae	
□ Artemisia douglasiana	California mugwort
□ Baccharis douglasii	Marsh baccharis
Baccharis pilularis	Coyote brush
Carduus pycnocephalus	Italian thistle
Chamomilla sauveolens	Pineapple weed
Cirsium vulgare	Bull thistle
□ Hypochoeris radicata	Smooth cat's ear
□ Lactuca serriola	Prickly lettuce
□ Picris echioides	Bristley ox-tongue
Senecio vulgaris	Groundsel
Silybum marianum	Milk thistle
□ Sonchus asper ssp. asper	Prickly sow-thistle
□ Taraxacum officionale	Dandelion
Berberidaceae	
□ Mahonia aquifolium*	Oregon grape
Betulaceae	
□ Betula nigra*	River birch
Bignoniaceae	
□ Tecomaria capensis*	Cape honesuckle
Brassicaceae	
Brassica nigra	Black mustard
□ Brassica rapa	Field mustard
Capsella bursa-pastoris	Shepherd's purse
Cardamine oligosperma	Bittercress
 Hirschfeldia incana 	Hoary mustard
 Raphanus sativus 	Wild radish
Rorippa nasturtium-aquaticum	Watercress
Campanulaceae	

	Campanula medium*	Canterbury bells	
Ca	Caprifoliaceae		
	Sambucus mexicana	Black elderberry	
	Symphoricarpos albus ssp. laevigatus	Snowberry	
Ca	ryophyllaceae		
	Dianthus deltoides*	Maiden pink	
	Stellaria media	Chickweed	
Co	onvolvulaceae		
	Convolvulus arvensis	Bindweed	
	Convolvulus cneorum	Bush morning glory	
Co	ornaceae		
	Aucuba japonica*	Varigated gold dust plant	
Cr	rassulaceae		
	Sedum telphium var. autumn joy*	Stone crop	
Cı	ıcurbitaceae		
	Marah fabaceus	California manroot	
Cı	Cupressaceae		
	Calocedrus decurrens*	Incense cedar	
	Cupressocyparis leylandii*	Leyland cypress	
	Cupressus funebris*	Mouning cypress	
	Thuja occidentalis*	American arborvitae	
Cy	peraceae		
	Carex aquatalis ssp. dives	Sitka sedge	
	Cyperus eragrostis	Tall cyperus	
	Scirpus maritimus	Prairie rush	
De	ennstaedtiaceae		
	Pteridium aquilinum*	Bracken fern	
Ericaceae			
	Arbutus unedo*	Strawberry tree	
	Arctostaphylos manzanita*	Common manzanita	
	Gaultheria shallon*	Salal	
Eu	phorbiaceae		
	Euphorbia oblongata	Oblong spurge	
	Euphorbia peplus	Petty spurge	

	Euphorbia spathulata	Spatulate leafed spurge	
Fa	Fabaceae		
	Acacia longifolia*	Sydney golden wattle	
	Ceratonia siliqua*	Carob	
	Gliditsia triacanthos*	Honey locust	
	Medicago polymorpha	California burclover	
	Prosopis glandulosa var. torreyana*	Honey mesquite	
	Robinia pseudoacacia*	Black locust	
	Trifolium incarnatum	Crimson clover	
	Trifolium sp.	Clover (lawn weed)	
	Vicia sativa ssp. nigra	Spring vetch	
Fa	gaceae		
	Quercus agrifolia	Coastal live oak	
	Quercus garryana*	Oregon white oak	
	Quercus lobata	Valley Oak	
	Quercus suber*	Cork oak	
Ga	Garryaceae		
	Garrya elliptica*	Coast silk tassel	
Ge	Geraneaceae		
	Erodium botrys	Long-beaked stork's bill	
	Erodium cicutarium	Red-stemmed stork's bill	
	Erodium moschatum	Whitestem filaree	
	Geranium dissectum	Cut-leaf geranium	
	Geranium molle	Crane's bill geranium	
	Pelargonium hortorum*	Common geranium	
Grossulariaceae			
	Ribes speciosum*	Fuchsia flowered gooseberry	
Hamamelidaceae			
	Liquidamber tyraciflua*	Sweetgum	
Hi	ppocastanaceae		
	Aesculus californica	California buckeye	
Iridaceae			
	Chasmanthe aethiopica*	Chasmanthe	

	Gladiolus hortus*	Gladiolus
	Iris douglasiana*	Douglas iris
	Iris germanica*	Bearded iris
Ju	glandaceae	
	Carya illinoensis*	Pecan
	Juglans californica var. hindsii	California black walnut
	Juglans regia	English walnut
Ju	ncaceae	
	Juncus patens	Spreading rush
La	miaceae	
	Lamium amplexicaule	Clasping henbit
	Lavendula angustifolia*	English lavender
	Lavendula dentata*	French lavender
	Mentha spicata var. spicata	Spearmint
	Salvia clevelandii*	Cleveland sage
	Salvia greggii*	Autumn sage
	Salvia leucocephylla*	Purple sage
	Salvia splendens*	Scarlet sage
	Salvia sonomensis*	Sonoma sage
La	uraceae	
	Laurus nobilis*	Sweet bay
	Umbellularia californica*	California bay laurel
Lil	iaceae	
	Allium neopolitiana*	White garlic
	Kniphofia uvaria*	Red hot poker
Ma	alvaceae	
	Malva nicaeensis	Bull mallow
	Malvella leprosa	Alkali mallow
Mo	praceae	
	Ficus carica*	Fig
	Ficus pumila*	Creeping fig
	Morus alba*	White mulberry
M	yricaceae	

	Myrica californica*	Pacific wax myrtle
Myrtaceae		
	Callistemon citrinus*	Lemon bottlebrush
	Eucalyptus sp.*	Australian gum tree
	Feijoa sellowiana*	Pineapple guava
	Myrtus communis*	True myrtle
Ol	leaceae	
	Ligustrum ovalifolium*	California privet
	Olea europea*	Olive
	Osmanthus heterophyllus*	False holly
	Syringa vulgaris*	Common lilac
Oı	nagraceae	
	Epilobium canum ssp. canum*	California fuchsia
	Epilobium ciliatum ssp.ciliatum	Willow herb
	Epilobium minutum	Slender annual fireweed
	Gaura lindheimeri*	Gaura
O	xalidaceae	
	Oxalis pes-caprae	Bermuda buttercup
Pa	llmae	
	Phoenix canariensis*	Canary Island date palm
	Washingtonia filafera*	California fan palm
	Washingtonia robusta*	Mexican fan palm
Pa	paveraceae	
	Eschscholzia californica	California poppy
	Romneya coulteri*	Matilija poppy
Ph	niladelphaceae	
	Philadelphus lewisii*	
Pi	naceae	
	Cedrus atlantica*	Atlas cedar
	Cedrus deodara*	Deodar cedar
	Cedrus libani*	Cedar of Lebanon
	Picea glauca*	White spruce
	Picea pungens*	Colorado spruce

Portulacaceae

	Picea sitchensis*	Sitka spruce
	Pinus ponderosa*	Ponderosa pine
	Pinus radiata*	Monterey pine
	Pseudotsuga menziesii*	Douglas fir
Pi	ttosporaceae	
	Pittosporum tobira*	Tobira
Pl	antaginaceae	
	Plantago lanceolata	Lanceleaf plantain, English plantain
	Plantago major	Big-leafed plantain
Po	paceae	
	Agrostis stolonifera	Creeping bent
	Arundo donax	Giant reed
	Avena fatua	Wild oat
	Bromus diandrus	Rip-gut brome
	Bromus carinatus var. carinatus	California brome
	Bromus hordeacus	Soft chess
	Cynodon dactylon	Bermuda grass
	Festuca rubra*	Red fescue
	Hordeum marinum var. gussonianum	Mouse barley
	Hordeum murinum var. leporinum	Foxtail barley
	Leymus triticoides	Creeping wild rye
	Nassella pulchra	Purple needlegrass
	Phalaris aquatica	Harding grass, Canary grass
	Poa annua	Annual bluegrass
	Poa pratensis	Kentucky bluegrass
	Polypogon monspeliensis	Rabbit's foot grass
	Triticum aestivitum	Wheat
	Vulpia myuros ssp. hirsuta	Fox-tail fescue
Po	olygonaceae	
	Polygonum arenastrum	Common knotweed
	Rumex crispus	Curley dock, Yellow dock
П	Rumex pulcher	Fiddle dock

	Claytonia perfoliata	Miner's lettuce		
	Portulaca oleracea	Common purslane		
Pr	Primulaceae			
	Anagallis arvensis	Scarlet pimpernel		
Pu	ınicaceae			
	Punica granatum*	Pomegranite		
Ra	nnunculaceae			
	Clematis armanii*	Evergreen clematis		
Ro	oseaceae			
	Chaenomeles lagenaria*	Japanese quince		
	Cotoneaster franchetii*	Franchet cotoneaster		
	Cotoneaster lacteus*	Big-leafed cotoneaster		
	Crataegus laevigata*	English hawthorn		
	Cydonia oblonga*	Quince		
	Eriobotrya japonica*	Loquat		
	Heteromeles arbutifolia	Toyon		
	Malus sylvestris, (domesticus?)*	Apple		
	Prunus armeniaca*	Apricot		
	Prunus avium*	Sweet cherry		
	Prunus cerasifera*	Cherry plum		
	Prunus domestica*	Plum		
	Prunus dulcis*	Almond		
	Prunus ilicifolia ssp. ilicifolia*	Holly-leaved cherry		
	Prunus lyonii*	Catalina cherry		
	Prunus persica*	Peach		
	Prunus salcina*	Japanese plum		
	Pyracantha coccinea*	Firethorn		
	Pyrus communis*	Common pear		
	Rhaphiolepis indica*	Indian hawthorn		
	Rosa banksiae*	Lady banks rose		
	Rosa californica	California rose		
	Rosa harisonii*	Harison's yellow rose		
	Rosa laevigata*	Cherokee rose		

Valerianaceae

	Rosa sp.*	Rose	
	Rubus discolor	Himalaya blackberry	
Ru	ıbiaceae		
	Galium aparine	Bedstraw	
Ru	ıtaceae		
	Citrus limon*	Lemon	
	Citrus sinensis*	Orange	
Sa	licaceae		
	Salix laevigata	Red willow	
	Salix lasiolepis	Arroyo willow	
Sa	xifragaceae		
	Bergenia crassifolia*	Winter blooming bergenia	
	Carpenteria californica*	Bush anemone	
	Deutzia scabra*	Deutzia	
	Heuchera micrantha*	Alum root, Coral bells	
	Hydrangea macrophylla*	Big leaf hydrangea	
Sc	Scrophulariaceae		
	Kickxia elatine	Fluellin	
Solanaceae			
	Nicotiana glauca*	Tree tobacco	
Ste	erculiaceae		
	Fremontodendron californica*	Flannel bush	
Ta	mariaceae		
	Tamarix gallica*	Tamarisk	
Ta	xodiaceae		
	Sequoia sempervirens*	Coast redwood	
	Sequoiadendron giganteum*	Giant sequoia	
Th	ymelaeaceae		
	Daphne odora*	Winter daphne	
Ulmaceae			
	Ulmus pumila*	Siberian elm	
Urticaceae			
	Urtica dioica ssp. holosericea		

	Centranthus ruber*	Red valerian	
Ve	rbenaceae		
	Phyla nodiflora var. nodiflora	Common lippia	
Vi	scaceae		
	Phoradendron macrophyllum	Big leaf mistletoe	
Vi	Vitaceae		
	Parthenocissus vitacea	Woodbine, Virginia creeper	
	Vitis vinifera*	Grape	
Zygophyllaceae			
	Tribulus terrestris	Puncturevine	

Plant Species Checklist for John Muir N.H.S.

Gravesite

LA	ATIN NAME	COMMON NAME
Aı	nacardiaceae	
	Toxicodendron diversilobum	Poison oak
A	piaceae	
	Torilis arvensis	Field hedge parsley
A	pocynaceae	
	Nerium oleander	Oleander
	Vinca major	Periwinkle
Aı	raliaceae	
	Hedera helix	English ivy
As	steraceae	
	Artemisia douglasiana	California mugwort
	Baccharus pilularis	Coyote brush
	Carduus pycnocephalus	Italian thistle
	Cirsium vulgare	Bull thistle
	Helenium puberulum	Sneeze-weed, Rosilla
	Lactuca serriola	Prickly lettuce
	Picris echioides	Bristly ox-tongue
	Senecio vulgaris	Groundsel
	Sonchus oleraceus	Common sow thistle
	Xanthium strumarium	Cocklebur
Ве	etulaceae	
	Corylus cornuta var. californica	California hazelnut
Br	rassicaceae	
	Brassica rapa	Field mustard
	Cardamine oligosperma	Bittercress
	Rorippa nasturtium-aquaticum	Watercress

Caprifoliaceae

	Sambucus mexicana	Black elderberry
Ca	ryophyllaceae	
	Stellaria media	Chickweed
Co	nvolvulaceae	
	Convolvulus arvensis	Bindweed
Cu	curbitaceae	
	Marah fabaceus	California manroot
Cu	pressaceae	
	Calocedrus decurrens	Incense cedar
	Cupressus sp.	Cypresss
	Juniperus sp.	Juniper
Dr	yopteridaceae	
	Polystichum munitum	Western sword fern
Eu	phorbiaceae	
	Euphorbia oblongata	Oblong spurge
	Euphorbia peplus	Petty spurge
Fa	baceae	
	Medicago polymorpha	California bur clover
	Melilotus indica	Sour clover
	Robinia pseudoacacia	Black locust
Fa	gaceae	
	Quercus agrifolia	Coastal live oak
	Quercus lobata	Valley oak
Ge	eraneaceae	
	Erodium moschatum	Whitestem filaree
	Geranium dissectum	Cut-leaf geranium
Ha	mamelidaceae	
	Liquidambar styraciflua	Sweetgum
Hippocastanaceae		
	Aesculus californica	California buckeye
Juglandaceae		
	Juglans californica var. hindsii	California black walnut

	Juglans regia	English walnut	
La	Lamiaceae		
	Melissa officinalis	Sweet melissa	
	Mentha spicata var. spicata	Spearmint	
	Stachys ajugoides var. rigida	Hedge nettle	
Lil	liaceae		
	Agapanthas orientalis	Lilly of the Nile	
	Narcissus sp.	Narcissus, Daffodil	
La	uraceae		
	Umbellularia californica	California bay	
Ma	alvaceae		
	Malva nicaeensis	Bull mallow	
M	yrtaceae		
	Eucalyptus viminalis	Manna gum	
Ox	alidaceae		
	Oxalis pes-caprae	Bermuda buttercup	
Or	nagraceae		
	Epilobium ciliatum ssp. ciliatum	Willow herb	
Pa	paveraceae		
	Dicentra formosa	Bleeding heart	
	Eschscholzia californica	California poppy	
Ph	iladelphaceae		
	Philadelphus lewisii	Mock orange	
Piı	naceae		
	Cedrus atlantica	Atlas cedar	
	Pinus sabiniana	Grey Pine	
	Pinus sp.	Pine	
Plantaginaceae			
	Plantago major	Big leaf plantain	
Platanaceae			
	Platanus racemosa	California sycamore	
Po	Poaceae		
	Arundo donax	Giant reed	

Salicaceae

	Avena fatua	Wild oat	
	Avena barbata	Slender wild oat	
	Bromus diandrus	Rip-gut brome	
	Cynodon dactylon	Bermuda grass	
	Cynosurus echinatus	Hedgehog dogtail	
	Gastridium ventricosum	Nit grass	
	Hordeum murinum var. leporinum	Mouse barley	
	Leymus triticoides	Creeping wild rye	
	Lolium multiflorum	Italian ryegrass	
	Poa annua	Annual bluegrass	
	Polypogon monspeliensis	Rabbit's foot grass	
Pol	lygonaceae		
	Rumex crispus	Curly dock, Yellow dock	
	Rumex pulcher	Fiddle dock	
Pol	Portulacaceae		
	Claytonia perfoliata	Miner's lettuce	
Pri	mulaceae		
	Anagalis arvensis	Scarlet pimpernel	
Pu	nicaceae		
	Punica granatum	Pomegranite	
Ro	seaceae		
	Crataegus sp.	Hawthorn	
	Malus sylvestris	Apple	
	Pyrus communis	Common pear	
	Prunus cerasifera	Cherry plum	
	Prunus ilicifolia ssp. ilicifolia	Holly-leafed cherry	
	Prunus persica	Peach	
	Rosa californica	California rose	
	Rubus discolor	Himalaya blackberry	
	Rubus ursinus	California blackberry	
Ru	Rubiaceae		
	Galium aparine	Bedstraw	

	Salix laevigata	Red willow
	Salix laseolepis	Arroyo willow
Sc	rophulariaceae	
	Scrophularia californica ssp. californica	Figwort
	Veronica persica	Persian speedwell
Ta	xodiaceae	
	Sequoia sempervirens	Redwood
	Sequoiadendron giganteum	Giant sequoia
Ur	rticaceae	
	Urtica dioica ssp. holocericea	Hoary nettle
Vi	taceae	
	Parthenocissus vitacea	Woodbine, Virginia creeper
Zy	gophyllaceae	
	Tribulus terrestris	Puncturevine

Plant Species Checklist for Eugene O'Neill N.H.S.

LATIN NAME	COMMON NAME	
Aceraceae		
□ Acer macrophyllum	Big-leafed maple	
Amaranthaceae		
Amaranthus albus	Tumbleweed	
 Amaranthus blitoides 	Prostrate pigweed	
Amaranthus powellii	Powell's pigweed	
Amaranthus retroflexus	Rough pigweed	
Anacardiaceae		
□ Toxicadendron diversilobum	Poison oak	
Apiaceae		
□ Anthriscus caucalis	Bur-chevril	
Heracleum lanatum	Cow parsnip	
Osmorhiza chilensis	Wood cicely	
Sanicula crassicaulis	Pacific snakeroot	
□ Torilis arvensis	Field hedge parsley	
□ Torilis nodosa	Knotted hedge parsley	
Aristolochiaceae		
□ Aristolochia californica	Dutchman's pipe	
Asteraceae		
□ Agoseris grandiflora	California dandelion	
□ Achillea millefolium	Yarrow	
□ Artemisia douglasiana	California mugwort	
□ Aster chilensis	Common California aster	
Aster radulinus	Broad-leaved aster, Woodland aster	
Baccharis pilularis	Coyote brush	
Carduus pycnocephalus	Italian thistle	
 Centaurea solstitialis 	Yellow star thistle	
Chamomilla suaveolens	Pineapple weed	
Cirsium vulgare	Bull thistle	

	Cynara cardunculus	Artichoke thistle
	Filago galica	Fluffweed
	Gnaphalium luteo-album	Cudweed
	Helenium puberulum	Sneezeweed, Rosilla
	Hypochaerus glabra	Smooth cat's ear
	Hypochaerus radicata	Hairy cat's ear
	Lactuca serriola	Prickly lettuce
	Madia gracilis	Slender tarweed
	Picris echioides	Bristly ox-tongue
	Senecio vulgaris	Groundsel
	Silybum marianum	Milk thistle
	Soliva sessilis	South American soliva
	Sonchus asper ssp. asper	Prickly sow thistle
	Taraxacum officionale	Dandelion
	Tragopogon porrifolius	Salsify
	Xanthium spinosum	Spiny cocklebur
Bl	echnaceae	
	Woodwardia fimbriata	Giant chain fern
Bo	oraginaceae	
	Amsynchia mensiesii var. intermedia	Common fiddleneck
	Cynoglossum grande	Grand hound's tongue
	Myosotis latifolia	Forget-me-not
Br	rassicaceae	
	Brassica rapa	Field mustard
	Capsella bursa-pastoris	Shepherd's purse
	Cardamine californica	Milkmaids
	Cardamine oligosperma	Bittercress
	Lepidium nitidum var. nitidum	Poorman's peppergrass
	Raphanus sativus	Wild radish
	Sisymbrium officinale	Hedge mustard
	Sinapis arvensis	Charlock
Ca	prifoliaceae	
	Lonicera hispidula var. vacillans	California honeysuckle

	Sambucus mexicana	Black elderberry
	Symphorocarpus albus var. laevigatus	Snowberry
Ca	ryophyllaceae	
	Polycarpon tetraphyllum	Four-leafed allseed
	Spergula arvensis	Spurrey
	Spergularia rubra	Sand spurrey
	Stellaria media	Chickweed
Co	onvolvulaceae	
	Convolvulus arvensis	Bindweed
Cı	ıcurbitaceae	
	Marah fabaceus	California manroot
Dr	yopteridaceae	
	Dryopteris arguta	Wood fern
	Polystichum munitum	Western sword fern
Eq	Juisetaceae	
	Equisetum telmateia ssp. braunii	Giant horsetail
Er	ricaceae	
	Arbutus menziesii	Madrone
Eu	phorbiaceae	
	Chamaesyce maculata	Spotted spurge
	Eremocarpus setigerus	Dove weed, Turkey mullein
	Euphorbia peplus	Petty spurge
Fa	baceae	
	Lathyrus vestitus var. vestitus	Hillside pea
	Lupinus nanus	Sky lupine
	Medicago arabica	Spotted bur clover
	Medicago polymorpha	California bur clover
	Trifolium dubium	Little hop clover, Shamrock
	Trifolium glomeratum	Clustered clover
	Trifolium hirtum	Rose clover
	Trifolium subterraneum	Subterranean clover
	Vicia benghalensis	Purple vetch
	Vicia sativa ssp. nigra	Spring vetch

Fagaceae		
	Quercus agrifolia	Coastal live oak
	Quercus kellogii	Black oak
	Quercus lobata	Valley oak
Ge	eraniaceae	
	Erodium botrys	Long-beaked stork's bill
	Erodium cicutarium	Red-stemmed stork's bill
	Erodium moschatum	Whitestem filaree
	Geranium dissectum	Cut-leaved geranium
Hi	ppocastanaceae	
	Aesculus californica	California buckeye
Н	ydrophyllaceae	
	Nemophila heterophylla	Canyon nemophila
Iri	idaceae	
	Sisrynchium bellum	Blue-eyed grass
Ju	glandaceae	
	Juglans californica var. hindsii	California black walnut
	Juglans regia	English walnut
Ju	ncaceae	
	Juncus patens	Spreading rush
	Juncus xiphoides	Iris-leafed rush
La	nmiaceae	
	Lamium amplexicaule	Clasping henbit
	Satureja douglasii	Yerba buena
	Stachys ajugoides ssp. rigida	Hedge nettle
La	nuraceae	
	Umbellularia californica	California bay
Liliaceae		
	Calochortus albus	White globe lily
	Dichelostemma capitatum ssp. capitatum	Blue dicks
	Dichelostemma congestum	Round-toothed ookow
	Chlorogalum pomeridianum ssp. pomeridianum	Wavy-leaved soap plant
	Smilacena stellata	False solomon's seal
	Trillium chloropetalum	Giant trillium

M	alvaceae		
	Malva nicaeensis	Bull mallow	
M	Moraceae		
	Ficus carica	Fig	
M	yrtaceae		
	Eucalyptus globulus	Tasmanian bluegum	
Oı	nagraceae		
	Clarkia affinis	Chaparral clarkia	
	Clarkia purpurea ssp. quadrivulnera	Winecup clarkia	
	Epilobium brachycarpum	Annual fireweed	
	Epilobium ciliatum ssp. ciliatum	Willow herb	
O	xalidaceae		
	Oxalis corniculata	Wood sorrel	
	Oxalis pes-caprae	Bermuda buttercup	
Pa	paveracaeae		
	Eschscholzia californica	California poppy	
Pi	naceae		
	Pinus sabiniana	Grey Pine	
Pla	antaginaceae		
	Plantago lanceolata	Lanceleaf plantain, English plantain	
Po	paceae		
	Aira caryophylla	Hairgrass	
	Avena barbata	Slender wild oat	
	Avena fatua	Wild oat	
	Briza minor	Quaking grass	
	Bromus carinatus	California brome	
	Bromus diandrus	Rip-gut brome	
	Bromus hordeacus	Soft chess	
	Cynodon dactylon	Bermuda grass	
	Cynosorus echinatus	Hedgehog dogtail	
	Dactylis glomerata	Orchard grass	
	Deschampsia elongata	Slender hairgrass	
	Elymus glaucus	Blue wildrye	

	Hordeum marinum var. gussonianum	Mouse barley
	Hordeum murinum var. leporinum	Foxtail barley
	Lolium multiflorum	Italian rye grass
	Melica torreyana	Torrey melic
	Phalaris aquatica	Harding grass
	Phalaris minor	Littleseed canary grass
	Piptatherum milliaceum	Smilo grass
	Poa annua	Annual bluegrass
	Polypogon monspeliensis	Rabbit's foot grass
	Triticum aestivum	Wheat
	Vulpia bromoides	Brome fescue
	Vulpia myuros ssp. myuros	Rat-tail fescue
Po	olygonaceae	
	Polygonum arenastrum	Common knotweed
	Rumex crispus	Curly dock, Yellow dock
	Rumex pulcher	Fiddle dock
Po	olypodiaceae	
	Polypodium calirhiza	California polypody
Po	ortulacaceae	
	Calandrinia ciliata	Red maids
	Claytonia perfoliata	Miner's lettuce
Pr	rimulaceae	
	Anagallis arvensis	Scarlet pimpernel
Pt	reridaceae	
	Adiantum jordanii	Maidenhair fern
	Pentagramma triangularis	Goldback fern
Ra	anunculaceae	
	Ranunculus californicus	California buttercup
Ro	oseaceae	
	Cotoneaster franchetii	Franchet cotoneaster
	Heteromeles arbutifolia	Toyon
	Rubus discolor	Himalaya blackberry
П	Rubus ursinus	California blackberry

	Prunus cerasifera	Cherry plum	
	Potentilla glandulosa ssp. glandulosa	Sticky cinquefoil	
Ru	ıbiaceae		
	Galium aparine	Bedstraw	
	Galium murale	Tiny bedstraw	
	Galium porrigens ssp. porigens	Wall bedstraw	
	Sherardia arvensis	Field madder	
Sa	licaceae		
	Salix lasiolepis	Arroyo willow	
Sa	xifragaceae		
	Lithophragma heterophyllum	Hillside woodland star	
Sc	rophulariaceae		
	Mimulus aurantiacus	Sticky monkey flower	
	Scrophularia californica	California figwort	
	Veronica persica	Persian speedwell	
So	lanaceae		
	Solanum americanum	Small-flowered nightshade	
	Solanum umbelliferum	Blue-witch nightshade	
Ty	phaceae		
	Typha latifolia	Broad-leafed cattail	
Ur	rticaceae		
	Urtica dioica ssp. holosericea	Stinging nettle, Hoary nettle	
	Urtica urens	Dwarf nettle	
Ve	Verbenaceae		
	Phyla nodiflora var. nodiflora	Common lippia	
Viscaceae			
	Phoradendron macrophyllum	Big leaf mistletoe	
	Phoradendron villosum	Oak mistletoe	
Vi	Vitaceae		
	Vitis vinifera	Grape	
Zy	Zygophyllaceae		
	Tribulus terrestris	Puncturevine	

Plant Species Checklist for Port Chicago N.M.

LATIN NAME	COMMON NAME	
Amaranthaceae		
□ Amaranthus blitoides	Prostrate pigweed	
Aizoaceae		
Carpobrotus edulis	Iceplant	
Apiaceae		
□ Apium graveolens	Celery	
Foeniculum vulgare	Fennel	
Asteraceae		
Baccharis pilularis	Coyote brush	
Carduus pycnocephalus	Italian thistle	
Gnaphalium luteo-album	Cudweed	
Grindelia stricta var. angustifolia	Marsh gumplant	
Helenium puberulum	Sneezeweed, Rosilla	
 Hypochaeris radicata 	Hairy cat's ear	
□ Jaumea carnosa	Fleshy jaumea	
Lactuca serreola	Prickly lettuce	
Picris echioides	Bristly ox-tongue	
□ Sonchus asper ssp. asper	Prickly sow-thistle	
Brassicaceae		
□ Brassica nigra	Black mustard	
Hirschfeldia incana	Hoary mustard	
Lepidium latifolium	Perrenial pepperweed	
Raphanus sativus	Wild radish	
Caryophyllaceae		
Delycarpon tetraphyllum	Four-leaved allseed	
Spergularia rubra	Sand spurrey	
Chenopodiaceae		
Atriplex triangularis.	Spearscale	
Salicornia virginica	Pickleweed	
□ Salsola soda	Russian thistle	

Convolvulaceae			
	Convolvulus arvensis	Bindweed	
Cyperaceae			
	Scirpus americanus	Three square	
	Scirpus californica	California bulrush	
	Scirpus cernuus	Low clubrush	
Eu	phorbiaceae		
	Chamaesyce maculata	Spotted spurge	
Fa	baceae		
	Lotus corniculatus	Bird's foot lotus	
	Medicago polymorpha	California bur clover	
	Melilotus alba	White sweetclover	
	Melilotus indica	Sour clover	
Ge	eraniaceae		
	Erodium cicutarium	Red-stemmed stork's bill	
	Geranium dissectum	Cut-leaved geranium	
	Erodium moschatum	Whitestem filaree	
Ju	ncaceae		
	Juneus balticus	Wire rush	
Or	nagraceae		
	Epilobium brachycarpum	Annual fireweed	
Pa	paveraceae		
	Eschscholzia californica	California poppy	
Plu	umbaginaceae		
	Limonium californicum	Calif. sealavender, Marsh rosemary	
Po	aceae		
	Avena fatua	Wild oat	
	Bromus diandrus	Rip-gut brome	
	Bromus hordeacus	Soft chess	
	Bromus madritensis ssp. rubens	Foxtail chess, Red brome	
	Cynodon dactylon	Bermuda grass	
	Deschampsia cespitosa ssp. holciformis	Tufted hairgrass	
	Distichilis spicata	Saltgrass	
	Hordeum brachyantherum ssp. b.	Meadow barley	

Lolium multiflorum	Italian rye grass
Piptatherum miliaceum	Smilo grass
Polypogon monspeliensis	Rabbit's foot grass
Vulpia myuros ssp. myuros	Rat-tail fescue
nntaginaceae	
Plantago lanceolata	Lanceleaf plantain, English plantain
Plantago major	Big-leaf plantain
lygonaceae	
Rumex cripus	Curly dock, Yellow dock
saceae	
Potentilla anserina ssp. pacifica	Pacific silverweed
	Piptatherum miliaceum Polypogon monspeliensis Vulpia myuros ssp. myuros antaginaceae Plantago lanceolata Plantago major lygonaceae

Plant Species Master List

John Muir National Historic Site, Eugene O'Neill National Historic Site, and Port Chicago National Monument

Species on this list are organized alphabetically by family, with genus and species names listed alphabetically within each family. Native taxa (California native plants) are shown in *Bold Italic* while non-native taxa are shown in *Regular Italic*. John Muir N.H.S. property is made up of three areas: Mount Wanda, the John Muir House property, and John Muir's gravesite. Because of the relatively large size of the Mount Wanda portion of John Muir N.H.S., we have divided the area into quadrants (NE, NW, SE, and SW) for the sake of making plant locations more specific. At times, locations for taxa at Eugene O'Neill will also be given similar quadrant labels. Flowering periods reflect those observed during the 2002 season and are given as rough estimates for when one would expect to see the plant in bloom. These dates may vary depending on the year and the location.

Abbreviations

JOMU = John Muir N.H.S.

EUON = Eugene O'Neill N.H.S.

POCH = Port Chicago N.M.

California Exotic Pest Plants Council Codes:

CalEPPC-A1 = Most Invasive Wildland Pest Plants, Widespread

CalEPPC-A2 = Most Invasive Wildland Pest Plants, Regional

CalEPPC-B = Wildland Pest Plants of Lesser Invasiveness

CalEPPC-N = Need More Information

CalEPPC-G = Other Annual Grasses of Concern

CalEPPC-? = Considered But Not Listed

California Department of Food and Agriculture Codes:

NOX-C = Extremely Widespread (Containment Efforts Not Recommended)

NOX-B = Widespread (Potentially Containable)

NOX-Unrated = Weeds Without an Established Rating

Family: Acanthaceae

Scientific Name: *Acanthus mollis* Common Name: Bear's breach

Location: **JOMU -** House: East side of house near conservatory

Habitat Type: Garden

Growth Form: Perrenial Herb Flowering Period: Spring-Summer

Status: none Notes: Planted Family: Aceraceae

Scientific Name: *Acer macrophyllum* Common Name: Bigleaf maple

Location: **EUON** - NE corner of property and SE slide area

Habitat Type: Forest Growth Form: Tree Flowering Period: Spring

Status: none Notes: none

Family: Agavaceae

Scientific Name: *Agave americana* Common Name: Century plant

Location: JOMU - House: In front of Muir house, north end of oval

Habitat Type: Garden Growth Form: Succulent

Flowering Period: After 10 years produces 15-40 ft. flower stalk

Status: none Notes: Planted

Family: Aizoaceae

Scientific Name: *Carpobrotus edulis* Common Name: Iceplant, Sea fig

Location: **POCH** - Across road and on one pier piling

Habitat Type: Ruderal

Growth Form: Sprawling succulent

Flowering Period: All year Status: CalEPPC-A1

Notes: none

Family: Amaranthaceae

Scientific Name: *Amaranthus albus* Common Name: Tumbleweed

Location: **JOMU** - House: Apple orchard, east side near entrance;

EUON - Disked orchard

Habitat Type: Orchard Growth Form: Herb

Flowering Period: June-Aug

Status: none Notes: none Family: Amaranthaceae

Scientific Name: *Amaranthus blitoides*Common Name: Prostrate pigweed

Location: **JOMU -** House: Orchards; Grave: Orchards; **EUON -** Ruderal, NW; **POCH -** Ruderal

Habitat Type: Orchard/Ruderal

Growth Form: Herb

Flowering Period: May-June

Status: none Notes: none

Family: Amaranthaceae

Scientific Name: *Amaranthus powellii* Common Name: Powell's pigweed Location: **EUON** - Disked orchards

Habitat Type: Orchard Growth Form: Herb

Flowering Period: July-Sep

Status: none Notes: none

Family: Amaranthaceae

Scientific Name: Amaranthus retroflexus

Common Name: Rough pigweed Location: **JOMU -** House: Orchards

Habitat Type: Orchard Growth Form: Herb

Flowering Period: June-Aug

Status: none Notes: none

Family: Amaryllidaceae

Scientific Name: *Agapanthus orientalis* Common Name: Lily of the Nile

Location: **JOMU** - House: At northwest corner of Visitor Center; Grave: In grave plot

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: June-September

Status: none Notes: none Family: Amaryllidaceae

Scientific Name: *Amaryllis belladonna* Common Name: Naked lady, Belladonna lily

Location: JOMU - Wanda: On hill above maintenance; House: Around Muir house,

around adobe

Habitat Type: Garden Growth Form: Herb

Flowering Period: July-Sep

Status: none Notes: planted

Family: Amaryllidaceae

Scientific Name: Narcissus sp.

Common Name: Narcissus, Daffodil

Location: JOMU - House: Near adobe; Grave: In grave plot

Habitat Type: Garden Growth Form: Bulb Flowering Period: N/A

Status: none

Notes: Planted, maybe historic

Family: Anacardiaceae

Scientific Name: *Rhus ovata* Common Name: Sugar bush

Location: **JOMU** - House: In native plant garden west of Franklin creek

Habitat Type: All

Growth Form: Shrub/small tree Flowering Period: March-May

Status: none

Notes: Planted, not historic, native to California but not locally

Family: Anacardiaceae

Scientific Name: *Schinus molle*Common Name: Peruvian peppertree

Location: **JOMU** - House: Southeast corner of property, along fence

Habitat Type: Garden Growth Form: Tree

Flowering Period: Summer

Status: none

Notes: Planted, not historic

Family: Anacardiaceae

Scientific Name: Toxicodendron diversilobum

Common Name: Poison oak

Location: JOMU - Wanda: Ubiquitous; Grave: Riparian; House: Riparian;

EUON - Ubiquitous

Habitat Type: All

Growth Form: Shrub/Subshrub/Vine Flowering Period: March-May

Status: none Notes: none

Family: Apiaceae

Scientific Name: Anthriscus caucalis

Common Name: Bur-chervil

Location: **JOMU** - Wanda: Ubiquitous, generally in semi-shaded areas; House: Edge of

fields, ruderal; EUON - Ubiquitous.

Habitat Type: All Growth Form: Herb

Flowering Period: April-May

Status: none Notes: none

Family: Apiaceae

Scientific Name: Apium graveolens

Common Name: Celery

Location: **POCH** - Brackish marsh near high tide line

Habitat Type: Brackish Marsh

Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Apiaceae

Scientific Name: *Conium maculatum* Common Name: Poison hemlock

Location: JOMU - Wanda: NW, Edge of breached pond; House: Riparian

Habitat Type: Riparian/Ruderal

Growth Form: Herb

Flowering Period: May-July

Status: CalEPPC-B

Notes: none

Family: Apiaceae

Scientific Name: *Daucus pusillus*Common Name: Rattlesnake weed

Location: JOMU - Wanda: NE, Chaparral and Woodland

Habitat Type: Chaparral/Woodland

Growth Form: Herb

Flowering Period: May-June

Status: none Notes: none

Family: Apiaceae

Scientific Name: Foeniculum vulgare

Common Name: Fennel

Location: **JOMU -** Wanda: NE, along railroad tracks; House: along south fence

POCH - Ruderal

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-Aug

Status: CalEPPC-A1

Notes: none

Family: Apiaceae

Scientific Name: Heracleum lanatum

Common Name: Cow parsnip

Location: **EUON** - East, slide below park offices

Habitat Type: Forest Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Apiaceae

Scientific Name: Lomatium utriculatum

Common Name: Bladder parsnip Location: **JOMU -** Wanda: NW-NE

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-April

Family: Apiaceae

Scientific Name: Osmorhiza chilensis

Common Name: Wood cicely

Location: **JOMU -** Wanda: NW, forest edge near base of chaparral

Habitat Type: Forest Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Apiaceae

Scientific Name: Perideridia kelloggii

Common Name: Yampah

Location: **JOMU -** Wanda: All quadrants in patches

Habitat Type: Woodland Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Apiaceae

Scientific Name: Sanicula bipinnatifida

Common Name: Purple sanicle Location: **JOMU -** Wanda: NE-NW

Habitat Type: Woodland Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Apiaceae

Scientific Name: *Sanicula crassicaulis*Common Name: Pacific snakeroot
Location: **JOMU** – Wanda: Ubiquitous

Habitat Type: Woodland/Forest

Growth Form: Herb

Flowering Period: Feb-April

Family: Apiaceae

Scientific Name: *Scandix pecten-veneris* Common Name: Shepherd's needle

Location: **JOMU -** Wanda: All quadrants, open areas

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Apiaceae

Scientific Name: *Torilis arvensis* Common Name: Field hedge parsley

Location: **JOMU -** Wanda: Ubiquitous; House: Ubiquitous; Grave: Ubiquitous;

EUON - Ubiquitous

Habitat Type: Woodland Growth Form: Herb

Flowering Period: May-June

Status: none Notes: none

Family: Apiaceae

Scientific Name: Torilis nodosa

Common Name: Knotted hedge parsley

Location: **JOMU -** Wanda: Ubiquitous; House: Ubiquitous;

EUON - East forest

Habitat Type: Woodland Growth Form: Herb

Flowering Period: April-May

Status: none Notes: none

Family: Apocynaceae

Scientific Name: Nerium oleander

Common Name: Oleander

Location: **JOMU** - Grave: Planted along north border

Habitat Type: Orchard Growth Form: Shrub Flowering Period: Feb-Oct

Status: CalEPPC-?

Notes: none

Family: Apocynaceae

Scientific Name: Trachelospermum jasminoides

Common Name: Star jasmine

Location: **JOMU** - House: Along fence southwest of visitor center

Habitat Type: Garden Growth Form: Vine

Flowering Period: June-July

Status: none

Notes: Planted, not historic

Family: Apocynaceae

Scientific Name: *Vinca major* Common Name: Periwinkle

Location: **JOMU -** Wanda: NE hillside behind Maintenance and just south of main

parking area

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Status: CalEPPC-B

Notes: none

Family: Araceae

Scientific Name: Alocasia macrorrhiza

Common Name: Elephant's ear

Location: **JOMU -** House: Conservatory

Habitat Type: Garden Growth Form: Herb Flowering Period: Spring

Status: none Notes: Planted

Family: Araceae

Scientific Name: *Monstera deliciosa* Common Name: Split leaf philodendron

Location: JOMU - House: Indoor, conservatory in Muir House

Habitat Type: Garden Growth Form: Herb Flowering Period: n/a

Status: none

Notes: Planted, not historic

Scientific Name: Zantedeschia aethiopica

Common Name: Calla-lily

Location: **JOMU -** Wanda: SW 1 population along drainage/road; House: in garden at

Muir house, east of conservatory

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: March-May

Status: CalEPPC-?

Notes: Could be easily extirpated from Wanda and moved to House where it's historic

Family: Araliaceae

Scientific Name: Hedera canariensis

Common Name: Algerian ivy

Location: JOMU - House: Northeast Muir house

Habitat Type: Garden Growth Form: vine Flowering Period: N/A Status: CalEPPC-N

Notes: none

Family: Araliaceae

Scientific Name: *Hedera helix* Common Name: English ivy

Location: **JOMU** - Grave: north border; House: along fence

Habitat Type: Orchard/Ruderal

Growth Form: Herb Flowering Period: N/A Status: CalEPPC-B

Notes: none

Family: Aristolochiaceae

Scientific Name: Aristolochia californica

Common Name: Dutchman's pipe

Location: JOMU - Wanda: NW-NE, heavily shaded forest and woodland

EUON - East forest, wooded slopes above slide

Habitat Type: Forest/Woodland

Growth Form: Herb

Flowering Period: Feb-April

Family: Asclepiadaceae

Scientific Name: *Asclepias cordifolia* Common Name: Heart-leafed milkweed

Location: JOMU - Wanda: NW and NE; few plants on hill near fence-line in NW, and

few plants on hill above main trail in NE

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-May

Status: Ua1; 1 of 2 known locations or fewer in the East Bay

Notes: none

Family: Asclepiadaceae

Scientific Name: *Asclepias fascicularis*Common Name: Narrow-leafed milkweed

Location: JOMU - Wanda: NW-NE, on top along fire road

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-June

Status: none Notes: none

Family: Asteraceae

Scientific Name: Achillea millefolium

Common Name: Yarrow

Location: **JOMU -** Wanda: All quadrants

EUON - Wooded areas

Habitat Type: Woodland Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: Achyrachaena mollis

Common Name: Blow wives

Location: **JOMU -** Wanda: All quadrants, along roads on top of Mt. Wanda

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-May

Scientific Name: *Agoseris grandiflora* Common Name: California dandelion

Location: **JOMU -** Wanda: NE-NW, along roads, trails, deer paths

EUON - Field edges

Habitat Type: Ruderal/Woodland

Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Artemisia californica* Common Name: California sagebrush Location: **JOMU** - Wanda: NW-NE

Habitat Type: Chaparral Growth Form: Shrub Flowering Period: May-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Artemisia douglasiana* Common Name: California mugwort

Location: **JOMU -** Wanda: All quadrants; Grave: Riparian; House: Riparian

EUON - East side slide area

Habitat Type: Woodland/Chaparral/Riparian

Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: Aster chilensis

Common Name: Common California aster

Location: **JOMU** - Wanda: NE-NW, large patch in open grassland on top of Mt. Wanda,

scattered plants above train tunnel; EUON - Below park office

Habitat Type: Woodland/Forest/Grassland

Growth Form: Herb

Flowering Period: June-Aug

Scientific Name: Aster radulinus

Common Name: Broad-leaved aster, Woodland aster; Location: **JOMU -** Wanda: All quadrants in woodland

EUON - Forest

Habitat Type: Woodland/Forest

Growth Form: Herb

Flowering Period: June-Aug

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Baccharis douglasii* Common Name: Marsh baccharis Location: **JOMU** - House: Riparian

Habitat Type: Riparian Growth Form: Herb

Flowering Period: July-Sep

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Baccharis pilularis* Common Name: Coyote brush

Location: JOMU - Wanda: All quadrants; Grave: Orchard edge; House: Along fence;

EUON - Scattered in open areas; POCH - One bush near pier

Habitat Type: All Growth Form: Shrub Flowering Period: Aug-Oct

Status: none Notes: none

Family: Asteraceae

Scientific Name: Carduus pycnocephalus

Common Name: Italian thistle

Location: **JOMU -** Wanda: Ubiquitous; Grave: Ubiquitous; House: Ubiquitous;

EUON – Ubiquitous; **POCH** - Ubiquitous

Habitat Type: All Growth Form: Herb

Flowering Period: May-July Status: CalEPPC-B; NOX-C

Notes: none

Scientific Name: *Centaurea calcitrapa* Common Name: Purple star thistle

Location: JOMU - Wanda: SE, in disturbed field

Habitat Type: Ruderal Growth Form: Herb Flowering Period: July-Sep

Flowering Period: July-Sep Status: CalEPPC-B; NOX-B

Notes: none

Family: Asteraceae

Scientific Name: Centaurea melitensis

Common Name: Tocalote

Location: **JOMU** - Wanda: SW-NW-NE, small patches

Habitat Type: Woodland/Grassland

Growth Form: Herb

Flowering Period: May-July

Status: CalEPPC-B; NOX-Non-Rated

Notes: none

Family: Asteraceae

Scientific Name: *Centaurea solstitalis* Common Name: Yellow star thistle

Location: **JOMU** - Wanda: All quadrants;

EUON - NW near barn and NE field

Habitat Type: Grassland Growth Form: Herb

Flowering Period: June-Aug Status: CalEPPC-A1; NOX-C

Notes: Widespread, difficult to control/extirpate

Family: Asteraceae

Scientific Name: Chamomilla suaveolens

Common Name: Pineapple weed

Location: **JOMU -** Wanda: All quadrants along fire roads; House: Along paths

EUON - Along dirt roads

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: March-May

Scientific Name: Cichorium intybus

Common Name: Chicory

Location: **JOMU -** Wanda: Near maintenance

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: June-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Cirsium vulgare* Common Name: Bull thistle

Location: **JOMU -** Wanda: North along tracks; Grave: Orchard near entrance; House:

Riparian. EUON - East side slide area, SW undisked field

Habitat Type: Ruderal/Riparian

Growth Form: Herb

Flowering Period: June-August Status: CalEPPC-B; NOX-Non-Rated

Notes: none

Family: Asteraceae

Scientific Name: *Cynara cardunculus* Common Name: Artichoke thistle

Location: **JOMU -** Wanda: SE on grassy slopes; **EUON -** Ruderal next to wagon in NW

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: May-July Status: CalEPPC-A1; NOX-B

Notes: none

Family: Asteraceae

Scientific Name: Eriophyllum confertiflorum var. confertiflorum

Common Name: Golden yarrow

Location: **JOMU** - Wanda: NE-NW, wild flower trail, also above train tunnel and on

cliff over tracks

Habitat Type: Woodland/Chaparral

Growth Form: Shrub

Flowering Period: April-June

Scientific Name: *Filago gallica* Common Name: Fluffweed

Location: **JOMU** - Wanda: NW-NE, small patches;

EUON - Ruderal near barn

Habitat Type: Woodland/Chaparral/Ruderal

Growth Form: Herb

Flowering Period: May-June

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Gnaphalium californicum* Common Name: California everlasting

Location: **JOMU** - Wanda: NW-NE, small patches in chaparral

Habitat Type: Chaparral Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: Gnaphalium luteo-album

Common Name: Cudweed

Location: **JOMU -** Wanda: SE, ruderal

EUON - Ruderal near park office

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: Grindelia camporum var. camporum

Common Name: Common gum plant

Location: **JOMU -** Wanda: NE, trailhead to train tracks

Habitat Type: Woodland/Ruderal

Growth Form: Herb

Flowering Period: May-July

Scientific Name: Grindelia stricta var. angustifolia

Common Name: Marsh gum plant

Location: **POCH** - Edge of brackish marsh

Habitat Type: Brackish Marsh

Growth Form: Herb

Flowering Period: Aug-Oct

Status: C4 - Plant of Limited Distribution (CNPS Inventory)

Notes: none

Family: Asteraceae

Scientific Name: *Helenium puberulum* Common Name: Sneeze-weed, Rosilla Location: **JOMU** - Grave: Riparian;

EUON - East side slide area; **POCH** - Brackish marsh

Habitat Type: Riparian/Brackish Marsh

Growth Form: Herb

Flowering Period: June-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Helianthella castanea* Common Name: Mount Diablo sunflower

Location: **JOMU** - Wanda: NE-NW ecotones of woodland and chaparral

Habitat Type: Woodland/Chaparral

Growth Form: Herb

Flowering Period: April-June

Status: FC2 - Federal Endangered Species Candidate

Notes: none

Family: Asteraceae

Scientific Name: Holocarpha virgata ssp. virgata

Common Name: Sticky tarweed

Location: **JOMU -** Wanda: all quadrants

Habitat Type: Grassland Growth Form: Herb

Flowering Period: July-Sept

Scientific Name: *Hypochaeris glabra* Common Name: Smooth cat's ear

Location: **JOMU -** Wanda: NW, flower trail near *Allium* patch

Habitat Type: Woodland Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Asteraceae

Scientific Name: Hypochaeris radicata

Common Name: Hairy cat's ear

Location: **JOMU -** Wanda: Ubiquitous; House: Ruderal

EUON - Ruderal, ubiquitous. POCH - Ruderal

Habitat Type: Ruderal/Grassland/Woodland

Growth Form: Herb

Flowering Period: March-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Jaumea carnosa* Common Name: Fleshy jaumea

Location: **POCH** - Brackish marsh near Salicornia

Habitat Type: Brackish Marsh

Growth Form: Herb

Flowering Period: July-Sep Status: Lake's Watch List

Notes: none

Family: Asteraceae

Scientific Name: *Lactuca serriola* Common Name: Prickly lettuce

Location: **JOMU -** Wanda: All quadrants, ruderal and grassland; House: Ruderal/edges;

EUON - Ruderal; **POCH** - Ruderal

Habitat Type: Ruderal/Grassland

Growth Form: Herb

Flowering Period: June-Aug

Scientific Name: *Lactuca virosa* Common Name: Wild lettuce

Location: **JOMU** - Wanda: NE, 1 population above train tunnel on ridge

Habitat Type: Woodland Growth Form: Herb

Flowering Period: June-Aug

Status: none Notes: none

Family: Asteraceae

Scientific Name: Lagophylla ramosissima ssp. ramosissima

Common Name: Common hareleaf

Location: **JOMU -** Wanda: NW, open grassy area on slope

Habitat Type: Woodland Growth Form: Herb

Flowering Period: June-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: Madia elegans ssp. densiflora

Common Name: Common tarweed

Location: **JOMU** - Wanda: NE; above and below tracks, near main entrance

Habitat Type: Woodland/Ruderal

Growth Form: Herb

Flowering Period: June-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Madia gracilis*Common Name: Slender tarweed

Location: **JOMU -** Wanda: All quadrants; **EUON -** Grassland, E and NE

Habitat Type: Grassland/Woodland

Growth Form: Herb

Flowering Period: April-June

Scientific Name: Micropus californicus var. californicus

Common Name: Slender cottonweed

Location: **JOMU** - Wanda: NE-NW-SW, patches in sunny areas

Habitat Type: Woodland/Ruderal

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Picris echioides* Common Name: Bristly ox-tongue

Location: **JOMU -** Wanda: Ubiquitous; House - Ubiquitous;

EUON - Ubiquitous; **POCH** - Ruderal

Habitat Type: Grassland/Woodland/Ruderal

Growth Form: Herb

Flowering Period: June-Aug

Status: CalEPPC-?

Notes: none

Family: Asteraceae

Scientific Name: Psilocarphus tenellus var. tenellus

Common Name: Woolly head

Location: JOMU - Wanda: NW on road

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-May

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Senecio vulgaris* Common Name: Groundsel

Location: JOMU - Wanda: Ubiquitous; House - Ubiquitous; Grave - Ubiquitous;

EUON - Ubiquitous; **POCH -** Ruderal

Habitat Type: Grassland/Woodland/Ruderal

Growth Form: Herb

Flowering Period: March-May Status: NOX-Non-Rated

Notes: none

Scientific Name: Silybum marianum

Common Name: Milk thistle

Location: **JOMU** - Wanda: Ubiquitous; House - Ubiquitous; Grave - Ubiquitous;

EUON - Ubiquitous; **POCH** - Ruderal

Habitat Type: Grassland/Woodland/Ruderal

Growth Form: Herb

Flowering Period: June-Aug

Status: CalEPPC-? Notes: none

Family: Asteraceae

Scientific Name: *Solidago californica* Common Name: California goldenrod

Location: **JOMU** - Wanda: SW, 1 population above fire road near patch of *Lathyrus*

latifolius

Habitat Type: Grassland/Woodland

Growth Form: Herb

Flowering Period: June-Aug

Status: none Notes: none

Family: Asteraceae

Scientific Name: Soliva sessilis

Common Name: South American soliva

Location: **JOMU -** Wanda: All quadrants along roads;

EUON - Ruderal near barn

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Sonchus asper ssp. asper* Common Name: Prickly sow thistle

Location: **JOMU** - Wanda: All quadrants along roads and in fields;

EUON - Ubiquitous along roads and in grassland; **POCH** - Ruderal

Habitat Type: Ruderal/Grassland

Growth Form: Herb

Flowering Period: March-May

Scientific Name: *Sonchus oleraceus* Common Name: Common sow thistle

Location: JOMU - Wanda: All quadrants, ruderal areas and grassland

Habitat Type: Ruderal/Grassland

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Asteraceae

Scientific Name: Taraxacum officinale

Common Name: Dandelion

Location: **JOMU -** Wanda: SE, meadow near Alhambra Rd.;

EUON - Open grassland

Habitat Type: Grassland Growth Form: Herb

Flowering Period: March-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: Tragopogon porrifolius

Common Name: Salsify

Location: EUON - 1 plant directly in front of parking area

Habitat Type: Orchard Growth Form: Herb

Flowering Period: June-July

Status: none Notes: none

Family: Asteraceae

Scientific Name: Uropappus lindleyi

Common Name: Silver puffs

Location: JOMU - Wanda: NW, below wildflower trail near Eriophyllum and Allium

Habitat Type: Woodland Growth Form: Herb

Flowering Period: April-May

Scientific Name: *Wyethia angustifolia* Common Name: Narrowleaf mule ears

Location: JOMU - Wanda: NW, in shaded woodland

Habitat Type: Woodland Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Wyethia helenoides*Common Name: Grey mule ears

Location: **JOMU -** Wanda: All quadrants, sunny hillsides

Habitat Type: Grassland/Woodland

Growth Form: Herb

Flowering Period: Feb-May

Status: none Notes: none

Family: Asteraceae

Scientific Name: *Xanthium spinosum* Common Name: Spiny cocklebur Location: **EUON** - North disked field

Habitat Type: Orchard/Ruderal

Growth Form: Herb

Flowering Period: July-Sep

Status: CalEPPC-?

Notes: none

Family: Asteraceae

Scientific Name: Xanthium strumarium

Common Name: Cocklebur

Location: **JOMU -** Wanda: NE, along road under trestle

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: July-Sep

Status: none

Notes: Possibly not native

Family: Berberidaceae

Scientific Name: Mahonia aquifolium

Common Name: Oregon grape

Location: **JOMU -** House: Around Adobe

Habitat Type: Garden Growth Form: Shrub

Flowering Period: March-May

Status: none

Notes: Planted, not historic

Family: Betulaceae

Scientific Name: *Betula nigra* Common Name: River birch

Location: **JOMU -** House: Southwest corner of site

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Single tree, gift from local nursery in 1990.

Family: Betulaceae

Scientific Name: Corylus cornuta var. californica

Common Name: California hazelnut Location: **JOMU -** Grave: Riparian

Habitat Type: Riparian Growth Form: Shrub-Tree Flowering Period: N/A

Status: none Notes: none

Family: Bignoniaceae

Scientific Name: *Campsis radicans*Common Name: Common trumpetvine

Location: **JOMU -** House: One by NE pillar of Ramada behind Adobe

Habitat Type: Garden Growth Form: Vine

Flowering Period: August-September

Status: none

Notes: Planted, not historic

Family: Bignoniaceae

Scientific Name: *Tecomaria capensis* Common Name: Cape honeysuckle

Location: **JOMU -** House: Victorian garden

Habitat Type: Garden Growth Form: Vine

Flowering Period: October-Winter

Status: none

Notes: Planted, not historic

Family: Blechnaceae

Scientific Name: Woodwardia fimbriata

Common Name: Giant chain fern

Location: EUON - East forest and slide area

Habitat Type: Forest Growth Form: Fern Flowering Period: N/A

Status: none Notes: none

Family: Boraginaceae

Scientific Name: Amsinckia menziesii var. intermedia

Common Name: Common fiddleneck

Location: **JOMU** - Wanda: Ubiquitous in grassland and woodland, near roads;

EUON - Sunny areas, open grassland

Habitat Type: Grassland/Woodland

Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Boraginaceae

Scientific Name: *Cynoglossum grande* Common Name: Grand hound's tongue

Location: **JOMU** - Wanda: NW-NE-SE, few in shaded woodland/forest;

EUON - East slide area and north forest, few plants

Habitat Type: Forest/Woodland

Growth Form: Herb

Flowering Period: Feb-April

Family: Boraginaceae

Scientific Name: *Myosotis latifolia* Common Name: Forget-me-not Location: **EUON** - East slide area

Habitat Type: Grassland/Woodland

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Brassicaceae

Scientific Name: *Brassica nigra* Common Name: Black mustard

Location: **JOMU -** Wanda: Ubiquitous in grassland; House: Few plants along edges;

POCH - Ubiquitous, ruderal

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: March-May

Status: CalEPPC-B

Notes: none

Family: Brassicaceae

Scientific Name: *Brassica rapa* Common Name: Field mustard

Location: **JOMU -** Wanda: Ubiquitous in grassland; House: Fields; Grave: Orchards;

EUON - Ubiquitous in grassland and disked areas

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Brassicaceae

Scientific Name: Capsella bursa-pastoris

Common Name: Shepherd's purse

Location: **JOMU -** Wanda: All quadrants ruderal; House: Ruderal, ubiquitous;

POCH - Ubiquitous, ruderal

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: Feb-April

Family: Brassicaceae

Scientific Name: Cardamine californica

Common Name: Milk maids

Location: EUON - Shaded woodland, east side

Habitat Type: Woodland Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Brassicaceae

Scientific Name: Cardamine oligosperma

Common Name: Bitter cress

Location: **JOMU -** Wanda: All quadrants, woodland and ruderal; House: Orchard;

Grave: Ruderal; **EUON** - Ruderal, disked areas

Habitat Type: Woodland/Ruderal/Orchard

Growth Form: Herb

Flowering Period: Feb-April

Status: CalEPPC-B

Notes: none

Family: Brassicaceae

Scientific Name: *Hirschfeldia incana* Common Name: Hoary mustard

Location: JOMU - Wanda: SE, in field near stables; House: Field edges;

EUON - NW, near Eucalyptus; POCH - Ruderal

Habitat Type: Ruderal/Grassland

Growth Form: Herb

Flowering Period: May-June

Status: CalEPPC-N

Notes: none

Family: Brassicaceae

Scientific Name: *Lepidium latifolium* Common Name: Perrenial pepperweed

Location: **JOMU -** Wanda: SE, small patch in field near stables;

POCH - Ubiquitous, ruderal

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: May-July Status: CalEPPC-A1; NOX-B

Notes: Could be easily extirpated due to small population size

Family: Brassicaceae

Scientific Name: Lepidium nitidum var. nitidum

Common Name: Poorman's peppergrass

Location: JOMU - Wanda: All quadrants, ruderal;

EUON - Ruderal and disked areas

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Brassicaceae

Scientific Name: *Raphanus sativus* Common Name: Wild radish

Location: **JOMU -** Wanda: All quadrants in ruderal areas and grassland; House: Few

plants along edges; EUON - NE field; POCH - Ruderal

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Brassicaceae

Scientific Name: Rorippa nasturtium-aquaticum

Common Name: Watercress

Location: **JOMU** - House: In stream at south end of property; Grave: In creek

Habitat Type: Riparian Growth Form: Aquatic Herb Flowering Period: May-July

Status: none

Notes: Also just off property at Eugene O'Neill in pond outflow

Family: Brassicaceae

Scientific Name: Sinapis arvensis

Common Name: Charlock

Location: **JOMU -** Wanda: Ubiquitous in grassland;

EUON - NE, edge of field/orchard

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: March-May

Family: Brassicaceae

Scientific Name: Sisymbrium officinale

Common Name: Hedge mustard

Location: JOMU - Wanda: NE-NW (possibly in south as well) woodland edges;

EUON - NW, at Blemie's grave

Habitat Type: Woodland/Ruderal

Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Brassicaceae

Scientific Name: Thysanocarpus curvipes

Common Name: Fringepod

Location: **JOMU** - Wanda: NW-NE, few on open hillsides

Habitat Type: Woodland/Chaparral

Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Campanulaceae

Scientific Name: *Campanula medium* Common Name: Canterbury bells

Location: JOMU - House: North side of visitor center

Habitat Type: Garden Growth Form: Herb Flowering Period: winter

Status: none Notes: planted

Family: Caprifoliaceae

Scientific Name: Lonicera hispidula var. vacillans

Common Name: California honeysuckle

Location: **JOMU -** Wanda: All quadrants, in shaded forest;

EUON - Wooded areas, east side

Habitat Type: Forest Growth Form: Vine

Flowering Period: May-August

Family: Caprifoliaceae

Scientific Name: *Sambucus mexicana* Common Name: Blue Elderberry

Location: **JOMU -** Wanda: NW, along creeks; House: Riparian, fence lines; Grave:

Riparian; EUON - East slide area and next to park headquarters

Habitat Type: Forest/Riparian

Growth Form: Shrub

Flowering Period: May-June

Status: none Notes: none

Family: Caprifoliaceae

Scientific Name: Symphoricarpos albus var. laevigatus

Common Name: Snowberry

Location: JOMU - Wanda: All quadrants, in shaded forest; Grave: Riparian

EUON - Wooded areas, east side

Habitat Type: Forest Growth Form: Shrub

Flowering Period: May-August

Status: none Notes: none

Family: Caryophyllaceae

Scientific Name: *Dianthus deltoides* Common Name: Maiden pink

Location: JOMU - House: Muir house and adobe

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: June-August

Status: none

Notes: Planted, not historic

Family: Caryophyllaceae

Scientific Name: *Polycarpon tetraphyllum* Common Name: Four-leaved all-seed

Location: **EUON -** Ruderal, in front of Tao House;

POCH - Ruderal

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-July

Family: Caryophyllaceae Scientific Name: *Silene gallica*

Common Name: Windmill pink, Common catchfly

Location: **JOMU -** NW-NE, sunny hillsides

Habitat Type: Woodland/Chaparral

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Caryophyllaceae

Scientific Name: Spergula arvensis

Common Name: Spurrey

Location: **EUON** - Disked areas

Habitat Type: Ruderal/Orchard

Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Caryophyllaceae

Scientific Name: *Spergularia rubra* Common Name: Sand spurrey

Location: **JOMU -** Wanda: NE, roadside at property edge (probably elsewhere too);

EUON - Ruderal, disked areas, and roads

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Caryophyllaceae

Scientific Name: *Stellaria media* Common Name: Chickweed

Location: JOMU - Wanda: Ubiquitous, ruderal; House: In orchards and ruderal; Grave:

Orchard; EUON - Orchard, disked areas, ruderal

Habitat Type: Ruderal/Orchard

Growth Form: Herb

Flowering Period: March-May

Family: Celastraceae

Scientific Name: *Euonymus japonica* Common Name: Evergreen euonymus

Location: **JOMU** - House: Bush in front of Muir house, below path

Habitat Type: Garden Growth Form: Shrub Flowering Period: spring

Status: none

Notes: planted, not historic

Family: Chenopodiaceae

Scientific Name: Atriplex triangularis

Common Name: Spearscale

Location: **POCH -** Ruderal, just above tidal zone

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: August-September

Status: none Notes: none

Family: Chenopodiaceae

Scientific Name: *Chenopodium multifidum* Common Name: Cutleafed goosefoot

Location: **JOMU** - Wanda: Ruderal, on roadside near Maintenance, between sidewalk

and fence

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: August-September

Status: none Notes: none

Family: Chenopodiaceae

Scientific Name: Salicornia virginica

Common Name: Pickleweed

Location: **POCH -** Brackish marsh

Habitat Type: Brackish marsh Growth Form: Succulent Flowering Period: April-June

Family: Chenopodiaceae Scientific Name: *Salsola soda* Common Name: Russian thistle Location: **POCH -** Ruderal

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: July-Oct

Status: CalEPPC-N

Notes: none

Family: Convolvulaceae

Scientific Name: Convolvulus arvensis

Common Name: Bindweed

Location: **JOMU -** Wanda: Ubiquitous, grassland; House: Orchard; Grave: Orchard;

EUON - Orchards, disked areas, ruderal

Habitat Type: Grassland/Orchard/Ruderal

Growth Form: Vine

Flowering Period: April-July

Status: CalEPPC-?

Notes: none

Family: Convolvulaceae

Scientific Name: *Convolvulus cneorum* Common Name: Bush morning glory Location: **JOMU** - House: Adobe area

Habitat Type: Garden Growth Form: Herb

Flowering Period: May-September

Status: none

Notes: planted and maintained

Family: Cornaceae

Scientific Name: Aucuba japonica

Common Name: Varigated gold dust plant, Japanese aucuba Location: **JOMU -** House: North side of Visitor Center

Habitat Type: Garden Growth Form: Herb

Flowering Period: March-April

Status: none Notes: Planted Family: Crassulaceae

Scientific Name: Sedum telphium var. autumn joy

Common Name: Stonecrop

Location: **JOMU** - House: Garden right by conservatory

Habitat Type: Garden Growth Form: Herb

Flowering Period: March-April

Status: none

Notes: Planted, not historic

Family: Cucurbitaceae

Scientific Name: *Marah fabaceus*Common Name: California manroot

Location: **JOMU -** Wanda: All quadrants in partial to shaded areas;

EUON - Forest, east side and north side

Habitat Type: Forest Growth Form: Vine Flowering Period: N/A

Status: none Notes: none

Family: Cupressaceae

Scientific Name: Calocedrus decurrens

Common Name: Incense cedar

Location: **JOMU** - House: On slope west and north of Muir house; Grave: relict

ornamental tree next to grave

Habitat Type: Garden/Orchard

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Historic tree planted in Muir's time; Native to California, not native to East Bay

Family: Cupressaceae

Scientific Name: Cupressocyparis leylandii

Common Name: Leyland cypress

Location: **JOMU** - House: Planted along southeast fence

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none Notes: planted Family: Cupressaceae

Scientific Name: *Cupressus funebris* Common Name: Mourning cypress

Location: **JOMU** - House: East of Muir house along trail

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none Notes:

Family: Cupressaceae

Scientific Name: *Cupressus sp.* Common Name: Cypress

Location: **JOMU** - Grave, relict ornamental tree

Habitat Type: Orchard Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Potentially a native sp.

Family: Cupressaceae

Scientific Name: *Juniperus sp.* Common Name: Juniper

Location: **JOMU** - Grave, relict ornamental tree

Habitat Type: Orchard Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Potentially a native sp.

Family: Cupressaceae

Scientific Name: *Thuja occidentalis* Common Name: American arborvitae

Location: **JOMU** - House: Along road between Muir house and carriage house, near

tamarisks

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, possibly historic

Family: Cyperaceae

Scientific Name: Carex aquatilis var. dives

Common Name: Sitka sedge

Location: **JOMU** - House: Riparian, just above bridge

Habitat Type: Riparian Growth Form: Herb

Flowering Period: March-May

Status: Ua2 - More than 2 known localities in East Bay, but seriously threatened

Notes: none

Family: Cyperaceae

Scientific Name: Cyperus eragrostis

Common Name: Tall cyperus

Location: **JOMU -** House: Riparian

Habitat Type: Riparian Growth Form: Herb

Flowering Period: June-August

Status: none Notes: none

Family: Cyperaceae

Scientific Name: Scirpus americanus

Common Name: Three square Location: **POCH** - Brackish marsh

Habitat Type: Brackish marsh

Growth Form: Herb

Flowering Period: May-June

Status: none Notes: none

Family: Cyperaceae

Scientific Name: *Scirpus californicus*Common Name: California bulrush
Location: **POCH -** Low brackish marsh

Habitat Type: Brackish marsh

Growth Form: Herb

Flowering Period: May-July

Family: Cyperaceae

Scientific Name: *Scirpus cernuus*Common Name: Low clubrush
Location: **POCH -** Brackish marsh

Habitat Type: Brackish Marsh

Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Cyperaceae

Scientific Name: Scirpus maritimus

Common Name: Prairie rush

Location: JOMU - House: Riparian, near culvert

Habitat Type: Riparian Growth Form: Herb

Flowering Period: May-June Status: Lake's Watch List

Notes: none

Family: Dennstaedtiaceae

Scientific Name: Pteridium aquilinum

Common Name: Bracken fern

Location: **JOMU -** House: Behind Visitor center

Habitat Type: Garden Growth Form: Fern Flowering Period: N/A

Status: none

Notes: Planted, maybe historic

Family: Dryopteridaceae

Scientific Name: Dryopteris arguta

Common Name: Wood fern

Location: JOMU - Wanda: All quadrants in shaded forest;

EUON - Common in shaded forest

Habitat Type: Forest Growth Form: Fern Flowering Period: N/A

Family: Dryopteridaceae

Scientific Name: *Polystichum munitum* Common Name: Western sword fern Location: **JOMU** - Grave, riparian; **EUON** - East forest, riparian

Habitat Type: Riparian/Garden

Growth Form: Fern Flowering Period: N/A

Status: none

Notes:

Family: Ebenaceae

Scientific Name: *Diospyros kaki* Common Name: Persimmon

Location: JOMU - Wanda: Remnant planted tree at main parking area

Habitat Type: Woodland Growth Form: Tree

Flowering Period: March-April

Status: none Notes: none

Family: Equisetaceae

Scientific Name: Equisetum telmateia ssp. braunii

Common Name: Giant horsetail

Location: **EUON** - East side slide/seep area

Habitat Type: Forest/Riparian

Growth Form: Fern Flowering Period: N/A Status: Lake's Watch List

Notes: none

Family: Ericaceae

Scientific Name: Arbutus menziesii

Common Name: Madrone

Location: **EUON** - East side, above slide, few scattered trees;

Habitat Type: Forest Growth Form: Tree

Flowering Period: Feb-April Status: Lake's Watch List

Notes: none

Family: Ericaceae

Scientific Name: *Arbutus unedo* Common Name: Strawberry tree

Location: **JOMU** - House: At southeast corner of the Muir house, outside potting shed

Habitat Type: Garden Growth Form: Tree Flowering Period: Spring

Status: none

Notes: Historic planting

Family: Ericaceae

Scientific Name: Arctostaphylos manzanita

Common Name: Manzanita

Location: **JOMU** - House: One in native plant garden west of Franklin creek, and

Entrance to Visitor Center

Habitat Type: Garden Growth Form: Shrub Flowering Period: Spring

Status: none Notes: Planted

Family: Ericaceae

Scientific Name: Gaultheria shallon

Common Name: Salal

Location: **JOMU** - House: Garden in Adobe area

Habitat Type: Garden Growth Form: Shrub

Flowering Period: March-June

Status: none

Notes: Planted, not historic

Family: Euphorbiaceae

Scientific Name: Chamaesyce maculata

Common Name: Spotted spurge

Location: **JOMU** - Wanda: NW, along road and in disturbed field;

EUON - Disked orchard; **POCH** - Ruderal

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: June-Aug

Family: Euphorbiaceae

Scientific Name: *Eremocarpus setigerus*Common Name: Doveweed, Turkey mullein
Location: **JOMU** - Wanda: NW, side of road;

EUON - Ruderal near barn and water main

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: July-Sept

Status: none Notes: none

Family: Euphorbiaceae

Scientific Name: *Euphorbia lathyris* Common Name: Caper spurge

Location: **JOMU -** Wanda: Next to maintenance building

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Status: CalEPPC-N Notes: Horticultural relict

Family: Euphorbiaceae

Scientific Name: Euphorbia oblongata

Common Name: Oblong spurge

Location: **JOMU -** Wanda: NW, SE, several patches in ruderal areas. House: Dense

patches along Riparian and fence lines. Grave: Edge of Riparian

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Status: NOX-B Notes: none

Family: Euphorbiaceae

Scientific Name: *Euphorbia peplus* Common Name: Petty spurge

Location: **JOMU** - House: in garden areas around buildings.

EUON - Garden areas around Tao House

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Family: Euphorbiaceae

Scientific Name: *Euphorbia spathulata* Common Name: Spatulate leafed spurge

Location: **JOMU -** Wanda: NW-NE in oak woodland;

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-April

Status: none Notes: none

Family: Fabaceae

Scientific Name: Acacia longifolia

Common Name: Sydney Golden Wattle, Blackwood acacia Location: **JOMU** - House: South or east of house along fence

Habitat Type: Garden Growth Form: Tree/Shrub

Flowering Period: Late Winter-Early spring

Status: none

Notes: Historic planting.

Family: Fabaceae

Scientific Name: *Ceratonia siliqua* Common Name: Carob, St. John's bread

Location: JOMU - House: Behind Muir house near south fence and Northeast of

carriage house

Habitat Type: Orchard Growth Form: Tree

Flowering Period: March-May

Status:

Notes: Planted Historic trees

Family: Fabaceae

Scientific Name: Genista monspessulana

Common Name: French broom

Location: **JOMU** - Wanda: NE at edge of property, between tunnel and road;

Habitat Type: Ruderal Growth Form: Shrub

Flowering Period: March-May Status: CalEPPC-A1; NOX-C

Notes: Small patch that could be easily removed by one person and a weed-wrench.

Scientific Name: Gleditsia triacanthos

Common Name: Honey locust

Location: **JOMU** - House: North of Muir house along road to carriage house, near

tamarisks

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, not historic

Family: Fabaceae

Scientific Name: *Lathyrus latifolius* Common Name: Everlasting pea

Location: JOMU - Wanda: SW, above road

Habitat Type: Woodland/Ruderal

Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Fabaceae

Scientific Name: Lathyrus vestitus var. vestitus

Common Name: Hillside pea

Location: **JOMU** - Wanda: All quadrants, patches in woodland

 ${\bf EUON - Or chards}$

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-April

Status: none Notes: none

Family: Fabaceae

Scientific Name: *Lotus corniculatus* Common Name: Bird's foot lotus

Location: **JOMU -** Wanda: NW, side of road

POCH - side of road

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: June-July

Scientific Name: Lotus humistratus

Common Name: Hill lotus

Location: **JOMU -** Wanda: All quadrants, open hillsides

Habitat Type: Ruderal/Grassland

Growth Form: Herb

Flowering Period: March-April

Status: none

Notes: Nearly identical to L. wrangelianus. There is no reasonable distinction between

these two species - future study will most likely unite these two under one name.

Family: Fabaceae

Scientific Name: Lotus purshianus var. purshianus

Common Name: Spanish lotus

Location: **JOMU -** Wanda: NE, along and below tracks

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: June-July

Status: none Notes: none

Family: Fabaceae

Scientific Name: Lotus scoparius var. scoparius

Common Name: Deer weed

Location: **JOMU -** Wanda: NW, NE, in chaparral

Habitat Type: Chaparral Growth Form: sub-shrub Flowering Period: May-July

Status: none Notes: none

Family: Fabaceae

Scientific Name: *Lotus wrangelianus* Common Name: Common trefoil

Location: JOMU - Wanda: SE, along top fire road

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-May

Status: none

Notes: Nearly identical to *L. humistratus*

Scientific Name: *Lupinus bicolor* Common Name: Miniature lupine

Location: **JOMU -** Wanda: All quadrants, open areas

Habitat Type: Grassland Growth Form: Herb

Flowering Period: March-May

Status: none

Notes: Nearly identical to L. nanus. There is no reasonable distinction between these

two species - future study will most likely unite these two under one name.

Family: Fabaceae

Scientific Name: Lupinus formosus var. formosus

Common Name: Summer lupine

Location: JOMU - Wanda: NW-NE; N. of fire road, on top of Mt. Wanda

Habitat Type: Grassland

Growth Form: Herb/Sub-shrub Flowering Period: May-July

Status: none Notes: none

Family: Fabaceae

Scientific Name: Lupinus microcarpus var. microcarpus

Common Name: Chick lupine, Valley lupine

Location: **JOMU -** Wanda: SE; along top fire road

Habitat Type: Grassland/Ruderal

Growth Form: Sub-shrub Flowering Period: May-July

Status: none Notes: none

Family: Fabaceae

Scientific Name: Lupinus nanus

Common Name: Sky lupine, Douglas's lupine

Location: **JOMU -** Wanda: All quadrants, open areas

EUON - Open grassland and disked areas

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: March-May

Status: none

Notes: Nearly identical to *L. bicolor*

Scientific Name: Lupinus succulentus

Common Name: Arroyo lupine

Location: JOMU - Wanda: NW-NE; sunny hillsides

Habitat Type: Grassland/Ruderal

Growth Form: sub-shrub Flowering Period: May-July

Status: none Notes: none

Family: Fabaceae

Scientific Name: *Medicago arabica* Common Name: Spotted bur clover

Location: **JOMU -** Wanda: NW; along roads

EUON - Disked areas

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-May

Status: none Notes: none

Family: Fabaceae

Scientific Name: *Medicago polymorpha* Common Name: California bur clover

Location: **JOMU -** Wanda: Ubiquitous; House: Fields, open areas; Grave: Orchard;

EUON - Ubiquitous; POCH - Ruderal, mown area

Habitat Type: Grassland/Orchard/Ruderal

Growth Form: Herb

Flowering Period: March-May

Status: CalEPPC-?

Notes: none

Family: Fabaceae

Scientific Name: *Melilotus alba* Common Name: White sweetclover

Location: **POCH -** Ruderal

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-July

Scientific Name: *Melilotus indica* Common Name: Sourclover

Location: **JOMU -** Wanda: NE corner of property, likely elsewhere also

POCH - Ruderal, in high grass

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Fabaceae

Scientific Name: Prosopis glandulosa var. torreyana

Common Name: Honey mesquite

Location: **JOMU** - One tree on path between Muir house and carriage house

Habitat Type: Garden Growth Form: Tree Flowering Period: n/a

Status: none

Notes: Planted, historic, supposedly brought by Strenzel along with wife from Texas

Family: Fabaceae

Scientific Name: Robinia pseudoacacia

Common Name: Black locust

Location: **JOMU** - Wanda: NE, behind maintenance building; House: Along road east

of plum orchard, west of Muir house; Grave: 1 tree near grave

Habitat Type: Ruderal/Orchard

Growth Form: Tree

Flowering Period: March-May

Status: CalEPPC-B

Notes: Planted, does not appear to be spreading on Mt. Wanda.

Family: Fabaceae

Scientific Name: *Rupertia physodes* Common Name: California tea

Location: **JOMU** - Wanda: NE, shady slope above fire road; hill next to train tunnel

Habitat Type: Woodland Growth Form: Herb Flowering Period: N/A Status: Lake's Watch List

Scientific Name: Trifolium bifidum var. decipiens

Common Name: Deceiving clover

Location: **JOMU -** Wanda: NE-SE, along roads and deer trails

Habitat Type: Ruderal/Woodland

Growth Form: Herb

Flowering Period: April-May

Status: none Notes: none

Family: Fabaceae

Scientific Name: Trifolium dubium

Common Name: Little hop clover, Shamrock Location: **JOMU** - Wanda: Ubiquitous on roads;

 $\ensuremath{\mathbf{EUON}}$ - Dirt roads through orchards

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Fabaceae

Scientific Name: *Trifolium glomeratum* Common Name: Clustered clover Location: **EUON** - Dirt road near barn

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Fabaceae

Scientific Name: Trifolium gracilentum var. gracilentum

Common Name: Pinpoint clover

Location: JOMU - Wanda: NW-NE, Hillside below wildflower trail, and near train

tunnel

Habitat Type: Woodland Growth Form: Herb

Flowering Period: April-June

Scientific Name: *Trifolium hirtum* Common Name: Rose clover

Location: **JOMU -** Wanda: Ubiquitous, hillsides along roads, grassland;

EUON - Ubiquitous, grassland

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Fabaceae

Scientific Name: *Trifolium incarnatum* Common Name: Crimson clover

Location: **JOMU -** Wanda: NE, open field near road, also along train tracks; House:

Orchards, used as a cover-crop

Habitat Type: Ruderal/Orchard

Growth Form: Herb Flowering Period: Feb-May

Status: none

Notes: Use as a cover-crop seems to inhibit weed growth when not disked

Family: Fabaceae

Scientific Name: Trifolium microcephalum

Common Name: Smallhead clover

Location: **JOMU** – Wanda: NE, above train tunnel and nearby

Habitat Type: Woodland/Chaparral

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Fabaceae

Scientific Name: Trifolium microdon

Common Name: Valparaiso clover, Thimble clover

Location: **JOMU** - Wanda: NE, along main road near *Madia gracilis* patch

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Scientific Name: *Trifolium oliganthum* Common Name: Fewflower clover

Location: **JOMU -** Wanda: NE, along main road near *Madia gracilis* patch

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Fabaceae

Scientific Name: *Trifolium subterraneum* Common Name: Subterranean clover

Location: **JOMU** - Wanda: NW, along fire road near cement trough

EUON - In drainage next to parking area

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Fabaceae

Scientific Name: Trifolium wildenovii

Common Name: Tomcat clover

Location: JOMU - Wanda: NE-NW (possibly in south as well); common woodland

clover

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-June

Status: none Notes: none

Family: Fabaceae

Scientific Name: Vicia americana var. americana

Common Name: American vetch

Location: **JOMU -** Wanda: SE, woodland

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-May

Scientific Name: Vicia benghalensis

Common Name: Purple vetch

Location: **JOMU** - Wanda: NE-SE (possibly elsewhere too)

EUON - Orchards and grassland

Habitat Type: Grassland/Orchard

Growth Form: Herb

Flowering Period: April-July

Status: none Notes: none

Family: Fabaceae

Scientific Name: Vicia sativa ssp. nigra

Common Name: Spring vetch

Location: **JOMU -** Wanda: Ubiquitous; House: Orchards and edge areas;

EUON - Ubiquitous in grassland and orchards

Habitat Type: Grassland/Woodland/Orchard/Ruderal

Growth Form: Herb

Flowering Period: Feb-May

Status: none

Notes: Vicia sativa ssp. sativa may be present as well

Family: Fabaceae

Scientific Name: Wisteria sinensis Common Name: Chinese wisteria

Location: JOMU - House: At rear of Muir house, at rear of Adobe

Habitat Type: Garden Growth Form: Vine

Flowering Period: April-May

Status: none

Notes: planted, not historic

Family: Fagaceae

Scientific Name: *Quercus agrifolia* Common Name: Coast live oak

Location: JOMU - Wanda: Ubiquitous; House: Edges, fence line; Grave: Edge of

orchard and near grave plot; EUON - East and north forest

Habitat Type: Forest/Woodland

Growth Form: Tree Flowering Period: N/A

Scientific Name: Quercus douglasii

Common Name: Blue oak

Location: **JOMU -** Wanda: Ubiquitous in woodland

Habitat Type: Woodland Growth Form: Tree Flowering Period: N/A

Status: none Notes: none

Family: Fagaceae

Scientific Name: *Quercus garryana* Common Name: Oregon white oak

Location: **JOMU -** House: West of Muir house

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, historic

Family: Fagaceae

Scientific Name: Quercus keloggii

Common Name: Black oak

Location: **JOMU -** Wanda: Ubiquitous in woodland and forest;

EUON - East and north forest

Habitat Type: Woodland/Forest

Growth Form: Tree Flowering Period: N/A

Status: none Notes: none

Family: Fagaceae

Scientific Name: *Quercus lobata* Common Name: Valley oak

Location: JOMU - Wanda: Ubiquitous in woodland/forest; House: Edges and fence

line; Grave: Large single tree on west edge of site; EUON - East and north

forest

Habitat Type: Woodland/Forest

Growth Form: Tree Flowering Period: N/A

Scientific Name: *Quercus suber* Common Name: Cork oak

Location: **JOMU** - Wanda: NE, several on north-facing hill above road; House: Near

southwest corner of parking lot, just inside fence at corner

Habitat Type: Ruderal/Garden

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, not historic, has potential to spread up into Blue oak woodland.

Family: Garryaceae

Scientific Name: Garrya elliptica Common Name: Coast Silk Tassel

Location: **JOMU** - House: In native plant garden west of Franklin creek

Habitat Type: Garden Growth Form: Shrub

Flowering Period: December-February

Status: none

Notes: Planted, not historic

Family: Geraniaceae

Scientific Name: Erodium botrys

Common Name: Long-beaked stork's bill

Location: **JOMU -** Wanda: Ubiquitous; House: Ubiquitous;

EUON - Ruderal, disked areas

Habitat Type: All Growth Form: Herb

Flowering Period: Feb-June

Status: none Notes: none

Family: Geraniaceae

Scientific Name: *Erodium cicutarium* Common Name: Red-stemmed stork's bill

Location: **JOMU -** Wanda: Ubiquitous; House: Ubiquitous;

EUON - Ruderal, disked areas

Habitat Type: All Growth Form: Herb

Flowering Period: Feb-June

Family: Geraniaceae

Scientific Name: *Erodium moschatum* Common Name: Whitestem filaree

Location: **JOMU -** Wanda: Ubiquitous; House: Ubiquitous; Grave: Orchard;

EUON - Ruderal, disked areas

Habitat Type: All Growth Form: Herb

Flowering Period: Feb-June

Status: none Notes: none

Family: Geraniaceae

Scientific Name: *Geranium dissectum* Common Name: Cut-leaved geranium

Location: JOMU - Wanda: Ubiquitous; House: Ubiquitous; Grave: Orchard;

EUON - Ruderal, disked areas

Habitat Type: All Growth Form: Herb

Flowering Period: Feb-June

Status: none Notes: none

Family: Geraniaceae

Scientific Name: *Geranium molle*Common Name: Crane's bill geranium

Location: **JOMU -** Wanda: Ubiquitous; House: Ubiquitous;

Habitat Type: All Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Geraniaceae

Scientific Name: *Pelargonium hortorum* Common Name: Common geranium Location: **JOMU -** House: Around Adobe

Habitat Type: Garden Growth Form: Herb

Flowering Period: Spring-Fall

Status: none

Notes: Planted, Historic

Family: Grossulariaceae

Scientific Name: Ribes californicum var. californicum

Common Name: Hillside gooseberry

Location: **JOMU -** Wanda: NW, in shaded forest near chaparral and near tracks

Habitat Type: Forest Growth Form: Shrub

Flowering Period: Jan-March Status: Lake's Watch List

Notes: none

Family: Grossulariaceae

Scientific Name: Ribes speciosum

Common Name: Fuchsia flowered gooseberry

Location: **JOMU** - House: In native plant garden west of Franklin creek

Habitat Type: Garden Growth Form: Shrub Flowering Period: Jan-May

Status: Ua1

Notes: Planted, California native, but not locally

Family: Hamamelidaceae

Scientific Name: Liquidambar styraciflua

Common Name: Sweet gum

Location: JOMU - House: On Street at Visitor center; Grave: Relict ornamental tree

Habitat Type: Orchard/Garden

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, not historic

Family: Hippocastanaceae

Scientific Name: *Aesculus californica* Common Name: California buckeye

Location: **JOMU -** Wanda: Ubiquitous in woodland and forest; House: Riparian; Grave:

Riparian; **EUON** - East and north forest

Habitat Type: Woodland/Forest/Riparian

Growth Form: Tree

Flowering Period: May-June

Jepsen & Murdoch 2002

Family: Hydrophyllaceae

Scientific Name: Nemophila heterophylla

Common Name: Canyon nemophila

Location: **JOMU -** Wanda: All quadrants on shaded forest hillsides;

EUON - East side forest

Habitat Type: Forest Growth Form: Herb

Flowering Period: March-April

Status: none Notes: none

Family: Hypericaceae

Scientific Name: *Hypericum calycinum* Common Name: Creeping St. John's wort

Location: **JOMU -** Wanda: NE, on hill above north side open field

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: June-August

Status: none

Notes: Escaped groundcover species

Family: Iridaceae

Scientific Name: Chasmanthe aethiopica

Common Name: Chasmanthe

Location: **JOMU -** House: West side of Muir house

Habitat Type: Grassland/Woodland/Forest

Growth Form: Herb

Flowering Period: Feb-April

Status: none

Notes: Planted historic

Family: Iridaceae

Scientific Name: Gladiolus hortulanus

Common Name: Gladiolus

Location: **JOMU** - House: In victorian garden behind Muir house

Habitat Type: Garden Growth Form: Corm

Flowering Period: Spring-Fall

Status: none

Notes: Planted, not historic

Family: Iridaceae

Scientific Name: *Iris douglasiana* Common Name: Douglas iris

Location: **JOMU** - House: Native plant garden west of Franklin creek, in grass north of

Adobe

Habitat Type: Garden Growth Form: Bulb Flowering Period: Spring

Status: none

Notes: Planted, not historic

Family: Iridaceae

Scientific Name: *Iris germanica* Common Name: Bearded iris

Location: **JOMU** - House: Beds east of house, and in Victorian garden behind Muir

house

Habitat Type: Garden Growth Form: Bulb Flowering Period: Spring

Status: none

Notes: Planted, not historic

Family: Iridaceae

Scientific Name: *Sisyrinchium bellum* Common Name: Blue-eyed grass

Location: **JOMU** - Wanda: All quadrants, common wildflower;

EUON - East side forest and edge of grassland

Habitat Type: Grassland/Woodland/Forest

Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Juglandaceae

Scientific Name: Carya illinoensis

Common Name: Pecan

Location: **JOMU** - House: Two very large trees in orchard, East of Adobe

Habitat Type: Orchard Growth Form: Tree

Flowering Period: April-May

Status: none

Notes: Planted Historic

Family: Juglandaceae

Scientific Name: Juglans californica ssp. hindsii

Common Name: California black walnut

Location: **JOMU** - Wanda: NW-NE, in main lot, open area on north side edge, and 1

tree at second bridge on wildflower trail; House: Several in riparian area and many in walnut orchard; Grave: Riparian; **EUON** - Many in old orchards

Habitat Type: Woodland/Riparian/Orchard

Growth Form: Tree

Flowering Period: April-May

Status: FC2 - Federal Endangered Species Candidate

Notes: Many old orchard trees have rejected grafts of Juglans regia over time

Family: Juglandaceae

Scientific Name: *Juglans regia* Common Name: English walnut

Location: JOMU - Wanda: NE, on path from train tracks to road (a graft onto California

walnut); House: South of pear and apricot orchard; Grave: Riparian

EUON - Single tree on Northwest corner of Tao house, several in orchards

Habitat Type: Forest/Riparian

Growth Form: Tree

Flowering Period: April-May

Status: none

Notes: Many in cultivation at EUON and JOMU

Family: Juncaceae

Scientific Name: Juncus balticus

Common Name: Wire rush

Location: **POCH** - Upper edge of brackish marsh

Habitat Type: Brackish Marsh

Growth Form: Herb

Flowering Period: April-May

Family: Juncaceae

Scientific Name: *Juncus patens* Common Name: Spreading rush

Location: **JOMU -** Wanda: SW-NW, along western creek in clumps; House: Riparian;

EUON - East side slide area

Habitat Type: Riparian/Grassland/Woodland

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Juncaceae

Scientific Name: *Juncus xiphoides* Common Name: Iris-leaf juncus

Location: **JOMU** - Wanda: NW, 1st drainage south of cement trough;

EUON - East side slide area Habitat Type: Riparian/Grassland/Forest

Growth Form: Herb

Flowering Period: May-June

Status: none Notes: none

Family: Juncaceae

Scientific Name: *Luzula comosa* Common Name: Wood rush

Location: **JOMU -** Wanda: NW, in woodland

Habitat Type: Woodland Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Lamiaceae

Scientific Name: *Lamium amplexicaule* Common Name: Clasping henbit

Location: **JOMU -** Wanda: NE, along main trail near *Madia gracilis* patch; House: In

field behind park offices; **EUON** - In large NW disked field near *Eucalyptus*

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: March-May

Scientific Name: *Lavendula angustifolia* Common Name: English lavender

Location: JOMU - House: Victorian garden and herb garden behind Muir house

Habitat Type: Garden Growth Form: shrub

Flowering Period: July-August

Status: none

Notes: Planted, not historic

Family: Lamiaceae

Scientific Name: *Lavendula dentata* Common Name: French lavender

Location: **JOMU** - House: Victorian garden and herb garden behind Muir house

Habitat Type: Garden Growth Form: shrub

Flowering Period: Year-round

Status: none

Notes: Planted, not historic

Family: Lamiaceae

Scientific Name: Melissa officinalis

Common Name: Lemon balm, Sweet melissa

Location: **JOMU -** Grave: Riparian

Habitat Type: Riparian Growth Form: Herb Flowering Period: N/A

Status: none Notes: none

Family: Lamiaceae

Scientific Name: Mentha spicata var. spicata

Common Name: Spearmint

Location: JOMU - House: Riparian; Grave: Riparian

Habitat Type: Riparian Growth Form: Herb Flowering Period: N/A

Scientific Name: Monardella villosa ssp. villosa

Common Name: Coyote mint

Location: **JOMU** - Wanda: NW-NE, hillsides in chaparral and open woodland

Habitat Type: Chaparral/Woodland

Growth Form: Herb

Flowering Period: June-August

Status: none Notes: none

Family: Lamiaceae

Scientific Name: Rosmarium officinalis

Common Name: Rosemary

Location: **JOMU** - House: South of Muir house and along wall behind Visitor Center

Habitat Type: Garden Growth Form: Herb

Flowering Period: March-May

Status: none

Notes: Planted, not historic

Family: Lamiaceae

Scientific Name: *Salvia clevelandii* Common Name: Cleveland sage

Location: **JOMU** - House: Native plant garden west of Franklin creek

Habitat Type: Garden Growth Form: Shrub

Flowering Period: April-June

Status: none

Notes: California native, but not locally

Family: Lamiaceae

Scientific Name: *Salvi greggii* Common Name: Autumn sage

Location: JOMU - House: Southwest edge of property

Habitat Type: Garden Growth Form: Shrub

Flowering Period: Late Spring-Summer

Status: none

Notes: Planted, not historic

Scientific Name: Salvia leucocephylla

Common Name: Purple sage

Location: **JOMU** - House: Native plant garden west of Franklin creek

Habitat Type: Garden Growth Form: Shrub

Flowering Period: April-June

Status: none

Notes: Planted, not historic, California native, but not locally

Family: Lamiaceae

Scientific Name: *Salvia mellifera* Common Name: Black sage

Location: **JOMU** - Wanda: NW, 1 plant at top of chaparral at extreme edge of property

Habitat Type: Chaparral Growth Form: Shrub

Flowering Period: April-June

Status: none

Notes: Potentially the furthest north known individual of this species

Family: Lamiaceae

Scientific Name: Salvia splendens Common Name: Scarlet sage

Location: **JOMU -** House: Herb garden

Habitat Type: Garden Growth Form: Shrub

Flowering Period: Early Summer-Frost

Status: none

Notes: Planted, not historic

Family: Lamiaceae

Scientific Name: *Salvia sonomensis* Common Name: Sonoma sage Location: **JOMU -** House: Gardens

Habitat Type: Garden Growth Form: Shrub

Flowering Period: April-June

Status: none

Notes: Planted, not historic, California native, but not locally

Scientific Name: *Satureja douglasii* Common Name: Yerba buena Location: **EUON** - East slide area

Habitat Type: Forest Growth Form: Herb

Flowering Period: May-July

Status: none

Notes: Clinopodium douglasii is the most current name for this species, but has not been

recognized by the latest edition of the Jepson Manual

Family: Lamiaceae

Scientific Name: Scutellaria tuberosa

Common Name: Skullcap

Location: **JOMU** - Wanda: NE, several populations in northern end of chaparral

Habitat Type: Chaparral Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Lamiaceae

Scientific Name: Stachys ajugoides ssp. rigida

Common Name: Hedge nettle

Location: **JOMU -** Wanda: All quadrants, shaded forest and woodland; Grave: Riparian;

EUON - East forest

Habitat Type: Forest/Woodland/Riparian

Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Lauraceae

Scientific Name: *Laurus nobilis* Common Name: Sweet bay

Location: **JOMU** - House: Single tree due west of Muir house, along path, sapling in

cage on west side.

Habitat Type: Forest/Woodland

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: planted, not historic

Family: Lauraceae

Scientific Name: Umbellularia californica

Common Name: California bay

Location: **JOMU** - Wanda: Ubiquitous in forest and woodland; House: In oval directly

in front of Muir house; Grave: Riparian; EUON - East and north forest

Habitat Type: Forest/Woodland

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, maybe historic

Family: Liliaceae

Scientific Name: Allium neopolitanum

Common Name: White garlic

Location: **JOMU** - House: At rear of property, near gate behind Adobe

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: March-April

Status: NOX-B Notes: none

Family: Liliaceae

Scientific Name: *Allium serra* Common Name: Serrated onion

Location: **JOMU -** Wanda: NW, below wildflower trail near *Eriophyllum*

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Liliaceae

Scientific Name: Brodiaea elegans ssp. elegans

Common Name: Harvest brodiaea

Location: **JOMU -** Wanda: NE-NW, woodland and chaparral, in sunny spots

Habitat Type: Woodland/Chaparral

Growth Form: Herb

Flowering Period: May-June

Family: Liliaceae

Scientific Name: *Calochortus albus* Common Name: White globe lily

Location: EUON - East side, between slide and creek on ridge, and at south end of east

forest at edge of south draw

Habitat Type: Forest Growth Form: Herb Flowering Period: May Status: Lake's Watch List

Notes: none

Family: Liliaceae

Scientific Name: *Calochortus venustus* Common Name: Butterfly mariposa lily

Location: **JOMU** - Wanda: NE, single plant near edge of north-facing railroad cut, 1st

hogback west of train tunnel

Habitat Type: Woodland Growth Form: Herb

Flowering Period: May-June Status: Lake's Watch List

Notes: none

Family: Liliaceae

Scientific Name: Chlorogalum pomeridianum var. pomeridianum

Common Name: Wavv-leaved soap plant

Location: JOMU - Wanda: All quadrants, woodland

EUON - East forest

Habitat Type: Woodland/Forest

Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Liliaceae

Scientific Name: Dichelostemma capitatum ssp. capitatum

Common Name: Blue dicks

Location: **JOMU** - Wanda: All quadrants, open areas in oak woodland

Habitat Type: Woodland Growth Form: Herb

Flowering Period: Feb-April

Family: Liliaceae

Scientific Name: *Dichelostemma congestum*

Common Name: Round tooth ookow

Location: JOMU - Wanda: SW-SE (most likely in the north as well) in shaded

woodland

Habitat Type: Woodland Growth Form: Herb

Flowering Period: April-May

Status: none Notes: none

Family: Liliaceae

Scientific Name: Kniphofia uvaria

Common Name: Red hot poker, Torch lily

Location: **JOMU** - House: Along main road, north of Muir house, Northeast of Adobe

Habitat Type: Garden Growth Form: shrub Flowering Period: N/A

Status: none

Notes: Planted, not historic

Family: Liliaceae

Scientific Name: *Smilacena stellata* Common Name: False solomon's seal

Location: **EUON** - Next to drainage below park offices, dense colony

Habitat Type: Forest Growth Form: Herb

Flowering Period: April-May

Status: none Notes: none

Family: Liliaceae

Scientific Name: Trillium chloropetalum

Common Name: Giant trillium

Location: **EUON** - East slide area, near waterfall

Habitat Type: Forest Growth Form: Herb

Flowering Period: March-April Status: W - Lake's watch list

Family: Liliaceae

Scientific Name: Triteleia laxa

Common Name: Ithuriel's spear, Wally basket

Location: JOMU - Wanda: All quadrants, open areas in oak woodland

Habitat Type: Woodland Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Liliaceae, (Agavaceae)
Scientific Name: *Yucca elephantipes*Common Name: Giant spineless yucca

Location: **JOMU** - Wanda: NW, just beyond the maintenance building

Habitat Type: Ruderal Growth Form: Herb Flowering Period: N/A

Status: none

Notes: Horticultural relict

Family: Liliaceae

Scientific Name: *Zigadenus fremontii* Common Name: Star lily, Death camas

Location: **JOMU** - Wanda: NE (potentially elsewhere too), above train tunnel

Habitat Type: Woodland Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Malvaceae

Scientific Name: *Malva nicaeensis* Common Name: Bull mallow

Location: **JOMU -** Wanda: NW, SE, ruderal areas; House: Orchard, ruderal

EUON - Ruderal, disked areas

Habitat Type: Ruderal/Orchard

Growth Form: Herb

Flowering Period: May-August

Family: Malvaceae

Scientific Name: *Malvella leprosa* Common Name: Alkali mallow

Location: **JOMU** - House: Orchard, ruderal

Habitat Type: Ruderal/Orchard

Growth Form: Herb

Flowering Period: August-October

Status: none Notes: none

Family: Moraceae

Scientific Name: Ficus carica

Common Name: Fig

Location: **JOMU** - House: North side of site between carriage house and Adobe

EUON - East slide area

Habitat Type: Garden/Forest

Growth Form: Tree

Flowering Period: April-May

Status: CalEPPC-A2

Notes: Trees at JOMU House are historic

Family: Moraceae

Scientific Name: Ficus pumila Common Name: CreepingFig

Location: JOMU - House: South fence of parking lot

Habitat Type: Garden

Growth Form: evergreen vine

Flowering Period: n/a

Status: none

Notes: planted, not historic

Family: Moraceae

Scientific Name: *Morus alba* Common Name: White mulberry

Location: **JOMU** - House: Two trees near northwest corner of site near windmill

Habitat Type: Orchard Growth Form: Tree Flowering Period: n/a

Status: none

Notes: planted, not historic, (representation)

Family: Myricaceae

Scientific Name: *Myrica californica* Common Name: Pacific wax myrtle

Location: **JOMU** - House: along north fence, near largest fig tree

Habitat Type: Orchard Growth Form: Tree Flowering Period: Spring

Status: none

Notes: Planted, not historic

Family: Myrtaceae

Scientific Name: Callistemon citrinus Common Name: Lemon bottlebrush

Location: JOMU - House: 3 shrubs in Muir house west bed

Habitat Type: Garden Growth Form: Shrub Flowering Period: Spring

Status: none Notes: Planted

Family: Myrtaceae

Scientific Name: *Eucalyptus globulus* Common Name: Tasmanian blue gum

Location: JOMU - Wanda: NE-NW in roadside field;

EUON - NW, between field and pond

Habitat Type: Ruderal Growth Form: Tree Flowering Period: N/A Status: CalEPPC-A1

Family: Myrtaceae

Scientific Name: Eucalyptus camaldulensis, E. cebra, E. cladocalyx, E. globulus, E.

polyanthemos, E. resinifera, E. salicifolia, E. saligna, E. sideroxylon

Common Name: Murray red gum, Narrow leafed ironbark, Sugar gum, Silver dollar

gum, Red mahogany, Black peppermint, Sidney blue gum, Red iron bark Location: **JOMU -** House: South of Muir house, (some on Caltrans land)

Habitat Type: Garden Growth Form: Tree Flowering Period: Winter

Status: Some species considered weeds, (see *E. globulus*)

Notes: Mix of several species planted along fence south of Muir house, not historic

Family: Myrtaceae

Scientific Name: Eucalyptus viminalis

Common Name: Manna gum

Location: JOMU - House: Near back of Muir house; Gravesite: single enormous tree

Habitat Type: Ruderal Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Historic tree

Family: Myrtaceae

Scientific Name: Feijoa sellowiana Common Name: Pineapple guava

Location: **JOMU** - House: Two trees on north side of visitor center near post office

Habitat Type: Garden Growth Form: Tree/shrub Flowering Period: May-June

Status: none

Notes: Planted, not historic

Family: Myrtaceae

Scientific Name: *Myrtus communis* Common Name: True myrtle

Location: **JOMU** - House: Small one by potting shed at southeast corner of Muir house,

in shade of strawberry tree

Habitat Type: Garden Growth Form: Tree/shrub Flowering Period: n/a

Status: none

Notes: Planted, not historic

Family: Oleaceae

Scientific Name: *Ligustrum ocalifolium* Common Name: California privet

Location: JOMU - House: At path intersection northeast of Adobe

Habitat Type: Garden

Growth Form: Shrub/Small tree Flowering Period: May-June

Status: none

Notes: Planted, not historic

Family: Oleaceae

Scientific Name: Olea europea

Common Name: Olive

Location: **JOMU** - Wanda: SE (and 1 tree in NE), large monotypic forest of Olive in SE

corner of property; House: Along main park road east of carriage house

Habitat Type: Woodland/Orchard

Growth Form: Tree

Flowering Period: April-June

Status: CalEPPC-B

Notes: While the Wanda orchard is historic, it is rapidly spreading into surrounding areas

Family: Oleaceae

Scientific Name: Osmanthus heterophyllus

Common Name: False holly

Location: **JOMU -** House: Along west fence

Habitat Type: Garden

Growth Form: shrub/small tree Flowering Period: Fall-early spring

Status: none

Notes: Planted, maybe historic

Family: Oleaceae

Scientific Name: *Syringa vulgaris* Common Name: Common lilac

Location: **JOMU** - House: Four plants on west side of oval, in front of Muir house

Habitat Type: Garden Growth Form: Herb

Flowering Period: late spring

Status: none

Notes: Planted, Historic

Family: Onagraceae

Scientific Name: *Clarkia affinis* Common Name: Chaparral clarkia

Location: **JOMU -** Wanda: All quadrants;

EUON - Few plants in weedy lot next to barn Habitat Type: Chaparral/Woodland/Grassland/Ruderal

Growth Form: Herb

Flowering Period: April-June Status: Lake's Watch List

Notes: The distinction between *Clarkia affinis* and *Clarkia purpurea ssp. quadrivulnera* is both unclear and minute. Most keys use the character of fused sepals to differentiate the two species (all four fused or fused in pairs respectively). However, plants on Mt. Wanda were observed having both of these occurring on the same plant. The majority, however, had all four sepals fused together. Another difference between the species is size of the immature capsule (more than 9x longer than wide or less than 8x longer than wide respectively). In this regard, the plants found on Mt. Wanda were more like *C. purpurea ssp. quadrivulnera*. However, none of the plants on Mt. Wanda had the typical petal coloration of *C. purpurea ssp. quadrivulnera*, such as was observed at Eugene O'Neill N.H.S. Lewis & Lewis (1955), state that in the vicinity of Mt. Diablo that *C. affinis* and *C. purpurea ssp. quadrivulnera* appear to hybridize, and that *Godetia quadrivulnera var. vacensis* named by Jepson is probably this hybrid. Potentially, we could then refer to this species as *C. x vacensis*, but this issue needs more study.

Family: Onagraceae

Scientific Name: Clarkia purpurea ssp. quadrivulnera

Common Name: Winecup clarkia

Location: **EUON** - Large population in field on north property border

Habitat Type: Grassland Growth Form: Herb

Flowering Period: May-June

Status: none

Notes: This population has clear petal markings and sepals fused in pairs

Family: Onagraceae

Scientific Name: *Clarkia unguiculata* Common Name: Elegant Clarkia

Location: **JOMU** - Wanda: NW- NE, semi-shaded hillsides, and along fire road

Habitat Type: Woodland Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Onagraceae

Scientific Name: *Epilobium brachycarpum*

Common Name: Annual fireweed

Location: **JOMU** - Wanda: NW- NE, disturbed and open areas;

EUON - Ruderal; **POCH** - Ruderal

Habitat Type: Ruderal/Grassland

Growth Form: Herb

Flowering Period: July-Sept

Status: none

Notes: No status, but pervasive wayside weed of potential concern

Family: Onagraceae

Scientific Name: Epilobium canum ssp. canum

Common Name: California fuchsia

Location: **JOMU** - House: Garden in Adobe area

Habitat Type: Garden

Growth Form: Herb/Sub-shrub Flowering Period: Spring

Status: none

Notes: Planted, not historic

Family: Onagraceae

Scientific Name: Epilobium ciliatum ssp. ciliatum

Common Name: Willow herb

Location: **JOMU -** House: Riparian;

EUON - East side slide/seep area

Habitat Type: Forest/Riparian

Growth Form: Herb

Flowering Period: June-Aug Status: Lake's Watch List

Family: Onagraceae

Scientific Name: Epilobium minutum

Common Name: Willow herb

Location: **JOMU -** House: Riparian;

Habitat Type: Riparian Growth Form: Herb

Flowering Period: June-Aug

Status: Ua2- More than two locations, but seriously threatened Notes: One or two small plants, just where creek comes out of tunnel

Family: Onagraceae

Scientific Name: Gaura lindheimeri

Common Name: Gaura

Location: **JOMU -** House: Garden in front of Adobe, south front

Habitat Type: Garden Growth Form: Herb Flowering Period: Spring

Status: none

Notes: Planted, not historic

Family: Oxalidaceae

Scientific Name: Oxalis corniculata Common Name: Wood sorrel

Location: **EUON** - Ruderal near house, on lawns

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-Aug

Status: none

Notes: No status, but a weed of concern in many areas

Family: Oxalidaceae

Scientific Name: *Oxalis pes-caprae* Common Name: Bermuda Buttercup

Location: JOMU - Wanda: NW-NE, scattered on semi-shaded hillsides. House: Shaded

areas around buildings; Grave: in orchard, around grave

Habitat Type: Woodland/Ruderal/Orchard

Growth Form: Herb

Flowering Period: Feb-April

Status: CalEPPC-N

Family: Palmae

Scientific Name: *Phoenix canariensis* Common Name: Canary Island date palm

Location: **JOMU -** House: "Bent over palm" north of Muir house

Habitat Type: Garden Growth Form: Tree Flowering Period: n/a

Status: none

Notes: Planted, Historic

Family: Palmae

Scientific Name: *Washingtonia filafera* Common Name: California fan palm

Location: **JOMU** - House: At front porch of Muir house

Habitat Type: Garden Growth Form: Tree Flowering Period: n/a

Status: none

Notes: Planted, Historic

Family: Palmae

Scientific Name: *Washingtonia robusta* Common Name: Mexican fan palm

Location: JOMU - House: Two trees in southeast corner of property, one just southwest

of Muir house

Habitat Type: Garden Growth Form: Tree Flowering Period: n/a

Status: none

Notes: Planted, Historic

Family: Papaveraceae

Scientific Name: Eschscholtzia californica

Common Name: California poppy

Location: **JOMU -** Wanda: All quadrants, patches in open areas; House: Edges of

fields/fence lines; Grave: Orchard, field edges. **EUON - Scattered. POCH - Ruderal, edge areas**

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: April-July Status: CA State Flower

Family: Papaveraceae

Scientific Name: *Dicentra formosa* Common Name: Bleeding heart

Location: **JOMU** - Grave: Riparian, on opposite side of creek from grave

Habitat Type: Riparian Growth Form: Herb

Flowering Period: March-May

Status: Ua1 - 2 known localities or less in East Bay Notes: (potentially an escaped cultivated plant)

Family: Papaveraceae

Scientific Name: *Romneya coulteri* Common Name: Matilija Poppy

Location: **JOMU -** House: On slope behind Muir house

Habitat Type: Garden Growth Form: Shrub

Flowering Period: May-July

Status: none

Notes: Planted, historic

Family: Philadelphaceae

Scientific Name: Philadelphus lewisii

Common Name: Mock orange

Location: **JOMU -** Wanda: NW, single large shrub in North field, by *Eucalyptus*;

House: At Adobe; Grave: In shade next to grave plot.

Habitat Type: Ruderal/Riparian

Growth Form: Herb

Flowering Period: April-May

Status: none

Notes: Planted. Native to CA, but not East Bay

Family: Pinaceae

Scientific Name: *Cedrus atlantica* Common Name: Atlas Cedar

Location: **JOMU** - House: Semicircle west of house; Grave: One tree at entrance to

gravesite

Habitat Type: Garden/Orchard

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted historic

Family: Pinaceae

Scientific Name: *Cedrus deodara* Common Name: Deodar Cedar

Location: **JOMU** - House: One in semi-circle around Muir house, two large trees south

of Adobe

Habitat Type: Garden/Orchard

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted historic

Family: Pinaceae

Scientific Name: *Cedrus libani* Common Name: Cedar of Lebanon

Location: JOMU - House: One in semi-circle of trees west of Muir house.

Habitat Type: Garden/Orchard

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted historic

Family: Pinaceae

Scientific Name: *Picea glauca* Common Name: White spruce

Location: JOMU - House: East of Adobe

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, not historic

Family: Pinaceae

Scientific Name: *Picea pungens* Common Name: Colorado spruce

Location: **JOMU** - House: Blocking "historic view" of Muir house from the Adobe

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, not historic

Scientific Name: Picea sitchensis Common Name: Sitka spruce

Location: **JOMU** - House: Single tree with flat top southeast of Adobe

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, not historic

Family: Pinaceae

Scientific Name: Pinus ponderosa Common Name: Pacific ponderosa pine

Location: **JOMU** - House: Two trees planted in lawn north of Visitor Center

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, not historic

Family: Pinaceae

Scientific Name: Pinus radiata Common Name: Monterey pine

Location: JOMU - Wanda: At entrance to Strain Ranch; House: Behind visitor center

Habitat Type: Garden/Forest

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, Historic

Family: Pinaceae

Scientific Name: Pinus sabiniana

Common Name: Grey pine, Foothill pine Location: **JOMU -** Grave: 1 tree W of grave;

EUON - 1 tree by Blemie's grave

Habitat Type: Grassland Growth Form: Tree Flowering Period: N/A

Scientific Name: *Pinus sp.* Common Name: Pine

Location: **JOMU** - Wanda: Some trees planted at main park entrance

Habitat Type: Ruderal Growth Form: Tree Flowering Period: N/A

Status: none Notes: none

Family: Pinaceae

Scientific Name: Pseudotsuga menziesii

Common Name: Douglas fir

Location: **JOMU -** House: Near northeast corner of Adobe

Habitat Type: Garden Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, not historic

Family: Pittosporaceae

Scientific Name: Pittosporum tobira

Common Name: Tobira

Location: JOMU - House: Hedges along west fence lilne

Habitat Type: Garden Growth Form: Shrub Flowering Period: N/A

Status: none

Notes: Planted, not historic

Family: Plantaginaceae

Scientific Name: Plantago lanceolata

Common Name: Lanceleaf Plantain, English Plantain

Location: **JOMU -** Wanda: Widespread in disturbed, open areas; House: fields;

EUON - Disturbed, open areas; **POCH** - mowed areas

Habitat Type: Ruderal/Grassland

Growth Form: Herb

Flowering Period: March-June

Family: Plantaginaceae

Scientific Name: *Plantago major* Common Name: Big leaf plantain

Location: **JOMU -** House: Riparian; Grave: Riparian;

POCH - edge of high tide area

Habitat Type: Riparian/Brackish marsh

Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Platanaceae

Scientific Name: *Platanus racemosa* Common Name: California sycamore Location: **JOMU -** Grave: Riparian

Habitat Type: Riparian Growth Form: Tree Flowering Period: N/A

Status: Ua2 - More than 2 localities known, but seriously threatened

Notes: none

Family: Poaceae

Scientific Name: *Agrostis exarata* Common Name: Spike redtop

Location: **JOMU** - Wanda: SW, in bottom of creek below main confluence; Grave:

Creekbed

Habitat Type: Riparian Growth Form: Grass

Flowering Period: May-June

Status: none Notes: none

Family: Poaceae

Scientific Name: *Agrostis stolonifera* Common Name: Creeping bent Location: **JOMU -** House: Riparian

Habitat Type: Riparian Growth Form: Grass

Flowering Period: June-August

Status: none

Notes: Species determination uncertain

Scientific Name: Aira caryophyllea

Common Name: Hairgrass

Location: JOMU - Wanda: NE, open hillsides;

EUON - open areas

Habitat Type: Grassland/Ruderal

Growth Form: Grass

Flowering Period: April-June

Status: none Notes: none

Family: Poaceae

Scientific Name: *Arundo donax* Common Name: Giant Reed, Arundo

Location: **JOMU -** House: Riparian. Grave: Riparian

Habitat Type: Riparian Growth Form: Grass

Flowering Period: June-Sept

Status: CalEPPC-A1

Notes: none

Family: Poaceae

Scientific Name: *Avena barbata* Common Name: Slender Wild Oat

Location: **JOMU -** Wanda: all quadrants, widespread; Grave: Orchards, ruderal;

EUON - open areas

Habitat Type: Grassland/Ruderal/Orchard

Growth Form: Grass

Flowering Period: March-June

Status: CalEPPC-G

Notes: none

Family: Poaceae

Scientific Name: Avena fatua Common Name: Wild Oat

Location: **JOMU -** Wanda: Ubiquitous; House: Ubiquitous; Grave: Ubiquitous;

EUON - Ubiquitous; POCH - Ruderal, edge area

Habitat Type: Grassland/Ruderal/Orchard

Growth Form: Grass

Flowering Period: March-June

Status: CalEPPC-G

Notes: This non-native is one of the most abundant annual grasses in all areas surveyed

Scientific Name: *Briza minor* Common Name: Quaking grass

Location: **JOMU** - Wanda: NW-NE, few patches in open areas;

EUON - North grassland beyond forest

Habitat Type: Woodland/Chaparral

Growth Form: Grass

Flowering Period: March-May

Status: none Notes: none

Family: Poaceae

Scientific Name: Bromus carinatus var. carinatus

Common Name: California brome

Location: **JOMU -** Wanda: All quadrants; House: Edge of fields, fence lines;

EUON - Grassland, Forest, Orchards Habitat Type: Grassland/Ruderal/Orchard/Forest

Growth Form: Grass

Flowering Period: April-June

Status: none Notes: none

Family: Poaceae

Scientific Name: *Bromus diandrus* Common Name: Rip-gut brome

Location: **JOMU -** Wanda: Ubiquitous; House: Edge of fields, fence lines; **EUON -** Grassland, forest, orchards; **POCH -** Ruderal, edge area

Habitat Type: Grassland/Ruderal/Orchard/Forest

Growth Form: Grass

Flowering Period: April-June

Status: CalEPPC-G

Notes: This is also one of the most abundant annual grasses in all areas surveyed.

Family: Poaceae

Scientific Name: Bromus hordeacus

Common Name: Soft chess

Location: **JOMU -** Wanda: Ubiquitous; House: Orchards, fields;

EUON - Grassland, ruderal Habitat Type: Grassland/Ruderal/Orchard

Growth Form: Grass

Flowering Period: March-May

Scientific Name: Bromus madritensis ssp. rubens

Common Name: Foxtail chess, Red brome

Location: **JOMU -** Wanda: NW, along wildflower trail, woodland;

POCH - Rederal, edge area

Habitat Type: Grassland/Woodland/Ruderal

Growth Form: Grass

Flowering Period: March-May

Status: CalEPPC-A2

Notes: none

Family: Poaceae

Scientific Name: *Cynodon dactylon* Common Name: Bermuda grass

Location: JOMU - Wanda: NE, at entrance gate to fire road; House: Lawn behind

adobe; Grave: Orchard, ruderal; EUON - NW field next to water-main and

barn; POCH - Mowed area

Habitat Type: Ruderal/Orchard

Growth Form: Grass

Flowering Period: April-July

Status: NOX-C Notes: none

Family: Poaceae

Scientific Name: *Cynosorus echinatus* Common Name: Hedgehog dogtail

Location: **JOMU -** Wanda: NE, over tunnel; Grave: Orchard, ruderal;

EUON - Grassland, Orchards Habitat Type: Ruderal/Orchard/Woodland

Growth Form: Grass

Flowering Period: May-July

Status: none Notes: none

Family: Poaceae

Scientific Name: *Dactylis glomerata* Common Name: Orchard grass

Location: JOMU - Wanda: NE, field next to road; EUON - East slide area

Habitat Type: Ruderal Growth Form: Grass

Flowering Period: May-July

Scientific Name: Deschampsia cespitosa ssp. holciformis

Common Name: Tufted hairgrass. Location: **POCH -** Ruderal, edge area

Habitat Type: Ruderal Growth Form: Grass

Flowering Period: April-June

Status: Ub - 3-5 localities known in East Bay

Notes: none

Family: Poaceae

Scientific Name: *Deschampsia elongata* Common Name: Slender hairgrass

Location: **EUON** - Next to picnic table at park office entrance

Habitat Type: Ruderal Growth Form: Grass

Flowering Period: April-June Status: Lake's Watch List

Notes: none

Family: Poaceae

Scientific Name: Distichlis spicata

Common Name: Saltgrass

Location: **POCH -** High tidal march

Habitat Type: Brackish marsh

Growth Form: Grass

Flowering Period: June-July

Status: none Notes: none

Family: Poaceae

Scientific Name: Elymus glaucus ssp. glaucus

Common Name: Blue wildrye

Location: **JOMU -** Wanda: All quadrants;

 ${\bf EUON\hbox{ -} Grassland, Woodland}$

Habitat Type: Woodland/Grassland/Forest

Growth Form: Grass

Flowering Period: May-July

Scientific Name: Festuca rubra Common Name: Red fescue

Location: **JOMU -** House: North side of Adobe, lawn

Habitat Type: Woodland/Grassland/Forest

Growth Form: Grass

Flowering Period: May-July

Status: none

Notes: planted, not historic

Family: Poaceae

Scientific Name: Gastridium ventricosum

Common Name: Nit grass

Location: **JOMU** - Wanda: NW, top of chaparral and along train tracks; Grave:

Orchard, ruderal

Habitat Type: Woodland/Orchard/Ruderal

Growth Form: Grass

Flowering Period: May-July

Status: none Notes: none

Family: Poaceae

Scientific Name: Hordeum brachyantherum ssp. brachyantherum

Common Name: Meadow barley Location: **POCH -** Ruderal, edge area

Habitat Type: Ruderal Growth Form: Grass

Flowering Period: April-June

Status: none Notes: none

Family: Poaceae

Scientific Name: Hordeum marinum ssp. gussonianum

Common Name: Mouse barley

Location: **JOMU** - Wanda: NW-NE, open areas, dried pond; House: Fields;

EUON - Grassland

Habitat Type: Grassland/Ruderal

Growth Form: Grass

Flowering Period: April-June

Scientific Name: Hordeum murinum ssp. leporinum

Common Name: Foxtail barley

Location: JOMU - Wanda: Ubiquitous; House: Fields, orchards; Grave: Orchard,

ruderal; **EUON -** Grassland, ruderal Habitat Type: Grassland/Ruderal/Woodland

Growth Form: Grass

Flowering Period: March-May

Status: none Notes: none

Family: Poaceae

Scientific Name: *Leymus triticoides* Common Name: Creeping wild rye

Location: **JOMU** - Wanda: All quadrants, sunny to semi-shaded areas; House: Riparian,

near upper end of creek at Culvert; Grave: Riparian

Habitat Type: Grassland/Woodland

Growth Form: Grass

Flowering Period: May-July

Status: none Notes: none

Family: Poaceae

Scientific Name: *Lolium multiflorum* Common Name: Italian rye grass

Location: **JOMU -** Wanda: Ubiquitous; House: Ruderal, field edges;

EUON - Ubiquitous

Habitat Type: Grassland/Ruderal/Woodland/Orchard

Growth Form: Grass

Flowering Period: March-June

Status: CalEPPC-G

Notes: This is also one of the most abundant non-native annual grasses of areas surveyed

Family: Poaceae

Scientific Name: *Melica californica* Common Name: California melic

Location: **JOMU -** Wanda: NW, woodland, North-facing slopes; House: Riparian

Habitat Type: Woodland/Riparian

Growth Form: Grass

Flowering Period: April-June

Scientific Name: *Melica torreyana* Common Name: Torrey melic

Location: **JOMU -** Wanda: All quadrants; **EUON -** Forest above slide

Habitat Type: Woodland/Forest

Growth Form: Grass

Flowering Period: April-June

Status: none Notes: none

Family: Poaceae

Scientific Name: *Nasella lepida*Common Name: Foothill needlegrass

Location: JOMU - Wanda: NW, top of chaparral

Habitat Type: Woodland/Chaparral

Growth Form: Grass

Flowering Period: March-May

Status: none Notes: none

Family: Poaceae

Scientific Name: *Nasella pulchra*Common Name: Purple needlegrass

Location: **JOMU -** Wanda: All quadrants; House: Along SW fence line

Habitat Type: Grassland/Woodland

Growth Form: Grass

Flowering Period: March-May

Status: none Notes: none

Family: Poaceae

Scientific Name: *Phalaris aquatica* Common Name: Harding grass Location: **JOMU -** House: Riparian;

EUON - Orchard

Habitat Type: Orchard/Riparian

Growth Form: Grass

Flowering Period: May-August

Status: CalEPPC-B

Notes: Field just south of property with very large population of this weedy species

Scientific Name: Phalaris minor

Common Name: Littleseed canary grass Location: **EUON** - Orchard, disked areas

Habitat Type: Orchard Growth Form: Grass Flowering Period: July-Sep

Status: none Notes: none

Family: Poaceae

Scientific Name: *Phalaris paradoxa* Common Name: Hood canary grass

Location: **JOMU** - Wanda: NW, 1st drainage south of trough, and patches in north top

grassland

Habitat Type: Grassland Growth Form: Grass

Flowering Period: May-July

Status: none Notes: none

Family: Poaceae

Scientific Name: Piptatherum miliaceum

Common Name: Smilo grass

Location: **EUON** - Edge of road below pool;

POCH - Ruderal

Habitat Type: Ruderal Growth Form: Grass

Flowering Period: April-July

Status: CalEPPC-N

Notes: none

Family: Poaceae

Scientific Name: *Poa annua* Common Name: Annual bluegrass

Location: **JOMU -** Wanda: All quadrants, ruderal; House: Ruderal, orchard; Grave:

Orchard, ruderal; EUON - Ruderal

Habitat Type: Ruderal Growth Form: Grass

Flowering Period: March-May

Scientific Name: Poa secunda ssp. secunda

Common Name: One-sided bluegrass

Location: **JOMU** - Wanda: NW-NE-SW, patches in shaded woodland and forest

Habitat Type: Woodland/Forest

Growth Form: Grass

Flowering Period: April-June

Status: none Notes: none

Family: Poaceae

Scientific Name: *Polypogon monspeliensis* Common Name: Rabbit's foot grass

Location: **JOMU -** Wanda: SW, growing in sunny drainage, and NW in dried pond;

House: Riparian; Grave: Orchard, riparian, ruderal; EUON - East slide area;

POCH - High brackish marsh

Habitat Type: Riparian/Orchard/Ruderal/Brackish Marsh

Growth Form: Grass

Flowering Period: May-July

Status: none Notes: none

Family: Poaceae

Scientific Name: Triticum aestivum

Common Name: Wheat

Location: **JOMU** - Wanda: Along train tracks; House: occasionally planted as small

demo crop south of Adobe; Grave: Southern end of orchard;

EUON - NW, ruderal Habitat Type: Ruderal/Orchard

Growth Form: Grass

Flowering Period: April-August

Status: none

Notes: planted, few feral plants

Family: Poaceae

Scientific Name: *Vulpia bromoides* Common Name: Brome fescue

Location: **JOMU -** Wanda: NE, in open areas;

EUON - Grassland, ruderal

Habitat Type: Grassland/Woodland/Ruderal

Growth Form: Grass

Flowering Period: March-May

Scientific Name: Vulpia microstachys var. pauciflora

Common Name: Few-flowered fescue

Location: **JOMU -** Wanda: NE, in one dry open slope over tracks

Habitat Type: Woodland/Chaparral

Growth Form: Grass

Flowering Period: April-June

Status: none Notes: none

Family: Poaceae

Scientific Name: Vulpia myuros var. hirsuta

Common Name: Fox-tail fescue

Location: JOMU - House: Orchard near Adobe

Habitat Type: Orchard Growth Form: Grass

Flowering Period: March-May

Status: none Notes: none

Family: Poaceae

Scientific Name: Vulpia myuros var. myuros

Common Name: Rat-tail fescue

Location: **JOMU -** Wanda: NE, along road;

EUON - Grassland, ruderal

Habitat Type: Grassland/Ruderal

Growth Form: Grass

Flowering Period: March-May

Status: none Notes: none

Family: Polemoniaceae

Scientific Name: *Linanthus bicolor* Common Name: Bicolored linanthus

Location: **JOMU** - Wanda: NE-NW, north-facing oak woodland hillsides

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-April

Family: Polemoniaceae

Scientific Name: *Phlox gracilis* Common Name: Slender phlox

Location: **JOMU -** Wanda: NE-NW, shaded north-facing oak woodland hillsides

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-April

Status: none Notes: none

Family: Polygonaceae

Scientific Name: Eriogonum nudum var. auriculatum

Common Name: Nude buckwheat

Location: **JOMU -** Wanda: All quadrants, scattered in dry, open hillsides

Habitat Type: Grassland/Chaparral/Ruderal

Growth Form: Herb

Flowering Period: June-August

Status: none Notes: none

Family: Polygonaceae

Scientific Name: *Polygonum arenastrum* Common Name: Common knotweed

Location: **JOMU** - Wanda: NE, in field near *Eucalyptus*; House: Orchards, vineyard;

EUON - Ruderal, Blemie's grave

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Polygonaceae

Scientific Name: Rumex acetosella Common Name: Sheep sorrel

Location: **JOMU** - Wanda: NW-NE, field margins and ruderal areas (probably in south

as well)

Habitat Type: Ruderal/Grassland

Growth Form: Herb

Flowering Period: Feb-July

Family: Polygonaceae

Scientific Name: Rumex crispus

Common Name: Curly dock, Yellow dock

Location: **JOMU -** Wanda: All quadrants, common in fields and roads; House: Ruderal,

field edges, riparian; Grave: Orchard, ruderal; EUON - Ruderal, grassland;

POCH - Ruderal

Habitat Type: Ruderal/Grassland/Riparian/Orchard

Growth Form: Herb

Flowering Period: April-June

Status: none Notes: none

Family: Polygonaceae

Scientific Name: *Rumex pulcher* Common Name: Fiddle dock

Location: **JOMU** - Wanda: NW-NE, woodland margins; House: Riparian; Grave:

Riparian; EUON - Above pond, towards Tao House, ruderal

Habitat Type: Woodland/Riparian/Ruderal

Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Polypodiaceae

Scientific Name: *Polypodium calirhiza* Common Name: California polypody

Location: JOMU - Wanda: NW, dark woods; EUON - East forest and slide area

Habitat Type: Forest Growth Form: Fern Flowering Period: N/A

Status: none Notes: none

Family: Portulacaceae

Scientific Name: Calandrinia ciliata

Common Name: Red maids

Location: **JOMU** - Wanda: NW-NE-SW, widespread along roads, at times in grassland;

EUON - Ruderal, disked areas

Habitat Type: Ruderal/Grassland

Growth Form: Herb

Flowering Period: March-April

Family: Portulacaceae

Scientific Name: Claytonia perfoliata ssp. perfoliata

Common Name: Miner's lettuce

Location: JOMU - Wanda: Ubiquitous, mostly in woodland; House: Ubiquitous; Grave:

Orchard, shaded areas; EUON - Ruderal, disked areas

Habitat Type: Woodland/Forest/Grassland

Growth Form: Herb

Flowering Period: January-April

Status: none Notes: none

Family: Portulacaceae

Scientific Name: *Portulaca oleracea* Common Name: Common purslane Location: **JOMU -** House: Orchards

Habitat Type: Orchard Growth Form: Herb

Flowering Period: June-July

Status: none Notes: none

Family: Primulaceae

Scientific Name: *Anagallis arvensis* Common Name: Scarlet pimpernel

Location: JOMU - Wanda: All quadrants, ruderal and open areas; House: Ruderal,

orchards; EUON - Ruderal, disked areas

Habitat Type: Ruderal/Orchard

Growth Form: Herb

Flowering Period: March-June

Status: none Notes: none

Family: Primulaceae

Scientific Name: Dodecatheon hendersonii

Common Name: Shooting star

Location: JOMU - Wanda: NW-NE, generally oak woodland

Habitat Type: Woodland/Forest

Growth Form: Herb

Flowering Period: Feb-April

Family: Pteridaceae

Scientific Name: *Adiantum jordanii* Common Name: Maidenhair fern

Location: **JOMU -** Wanda: All quadrants, heavily shaded moist areas;

EUON - East forest

Habitat Type: Forest Growth Form: Fern Flowering Period: N/A

Status: none Notes: none

Family: Pteridaceae

Scientific Name: Pellaea andromedaefolia

Common Name: Coffee fern

Location: **JOMU** - Wanda: NW-NE, chaparral

Habitat Type: Chaparral Growth Form: Fern Flowering Period: N/A

Status: none Notes: none

Family: Pteridaceae

Scientific Name: Pentagramma triangularis ssp. triangularis

Common Name: Goldback fern

Location: **JOMU** - Wanda: All quadrants, steep areas, usually shaded by other plants

EUON - East forest

Habitat Type: Chaparral/Forest

Growth Form: Fern Flowering Period: N/A

Status: none Notes: none

Family: Punicaceae

Scientific Name: *Punica granatum* Common Name: Pomegranite

Location: **JOMU -** Wanda: NE, between parking area and main trail; House: Along

walkways south and north of house; Grave: Orchard, one large shrub

Habitat Type: Ruderal/Orchard

Growth Form: Shrub Flowering Period: N/A

Status: none

Notes: Planted, not historic

Family: Ranunculaceae

Scientific Name: *Clematis armandii* Common Name: Evergreen clematis

Location: **JOMU -** House: Along southeast fence

Habitat Type: Garden Growth Form: Vine

Flowering Period: March-April

Status: none Notes: Planted

Family: Ranunculaceae

Scientific Name: Delphinium hesperium ssp. hesperium

Common Name: Foothill Larkspur

Location: JOMU - Wanda: NW, on SW-facing slope near fence, and NE, below

wildflower trail, between 3 & 4 markers

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-May

Status: none

Notes: Flowered early on sunny NW slope, late on NE

Family: Ranunculaceae

Scientific Name: *Ranunculus californicus* Common Name: California buttercup Location: **JOMU** - Wanda: Ubiquitous;

EUON - Edge of grassland and forest on East and North

Habitat Type: Woodland/Grassland/Forest

Growth Form: Herb

Flowering Period: March-May

Status: none

Notes: Some will flower earlier and later than range above

Family: Ranunculaceae

Scientific Name: *Ranunculus muricatus* Common Name: Spiny buttercup

Location: **JOMU** - Wanda: SW-SE-NE, on roads, generally in damp, shaded areas

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Family: Rhamnaceae

Scientific Name: Rhamnus californica ssp. californica

Common Name: California coffeeberry

Location: JOMU - Wanda: NW-NE-SE, shaded forest, and few on top of train tunnel

Habitat Type: Forest/Woodland

Growth Form: Shrub

Flowering Period: Mar-May

Status: none Notes: none

Family: Rosaceae

Scientific Name: Adenostoma fasciculatum

Common Name: Chamise

Location: JOMU - Wanda: NW-NE, chaparral

Habitat Type: Chaparral Growth Form: Shrub Flowering Period: June-Aug

Status: none Notes: none

Family: Rosaceae

Scientific Name: Aphanes occidentalis

Common Name: Lady's mantle

Location: **JOMU** - Wanda: All quadrants, roads and woodland near roads

Habitat Type: Ruderal/Woodland

Growth Form: Herb

Flowering Period: Feb-April

Status: none Notes: none

Family: Rosaceae

Scientific Name: Chaenomeles lagenaria

Common Name: Japanese quince

Location: **JOMU** - House: In front of muir house just past large bay tree inside oval

Habitat Type: Orchard/Garden

Growth Form: Tree

Flowering Period: March-May

Status: none

Notes: Planted historic trees

Scientific Name: *Cotoneaster dammeri* Common Name: Bearberry cotoneaster

Location: **JOMU** - House: Adobe garden area

Habitat Type: Garden/Ruderal

Growth Form: Shrub

Flowering Period: April-June

Status: CalEPPC-N

Notes: none

Family: Rosaceae

Scientific Name: *Cotoneaster franchetii* Common Name: Franchet cotoneaster

Location: **JOMU -** Wanda: NE, along NE road; House: Fence lines;

EUON - Forest just above slide area

Habitat Type: Ruderal Growth Form: Shrub

Flowering Period: April-June

Status: CalEPPC-N

Notes: none

Family: Rosaceae

Scientific Name: *Cotoneaster lacteus*Common Name: Big-leafed cotoneaster
Location: **JOMU** - House: South fence line

Habitat Type: Ruderal Growth Form: Shrub

Flowering Period: June-Aug

Status: CalEPPC-A2

Notes: none

Family: Rosaceae

Scientific Name: *Crataegus laevigata* Common Name: English Hawthorn

Location: **JOMU** - House: NE corner of Park, right by gate; Grave: Large tree next to

grave plot

Habitat Type: Garden/Orchard

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, May be removed in future

Scientific Name: Cydonia oblonga

Common Name: Ouince

Location: **JOMU** - Wanda: SE, on road just entering park, forest below olive orchard;

House: West of Carriage house, and one in front of Adobe

Habitat Type: Garden/Orchard

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted historic

Family: Rosaceae

Scientific Name: Eriobotrya japonica

Common Name: Loquat

Location: **JOMU** - House: Southeast corner of house, near potting shed

Habitat Type: Garden Growth Form: Tree Flowering Period: Winter

Status: none

Notes: Planted, not historic

Family: Rosaceae

Scientific Name: Heteromeles arbutifolia

Common Name: Toyon

Location: **JOMU -** Wanda: All quadrants, in woodland and chaparral; House: Fence

lines, edges of fields; EUON - East and north forest

Habitat Type: Chaparral Growth Form: Shrub

Flowering Period: June-Aug

Status: none Notes: none

Family: Rosaceae

Scientific Name: Holodiscus discolor

Common Name: Oceanspray

Location: JOMU - Wanda: NW in draw between chaparral and forest

Habitat Type: Chaparral/Forest

Growth Form: Shrub

Flowering Period: Feb-April

Scientific Name: Malus sylvestris

Common Name: Apple

Location: **JOMU -** Wanda: one tree in SW on hill in grassland; House: Apple orchard

from turnstile to south east corner of site, one tree near southwest corner of

Muir house:

Habitat Type: Forest/Grassland

Growth Form: Tree

Flowering Period: April-May

Status: none Notes: none

Family: Rosaceae

Scientific Name: Oemleria cerasiformis

Common Name: Oso berry

Location: JOMU - Wanda: NW-NE, shaded forest, one bush in SE forest

Habitat Type: Forest Growth Form: Shrub

Flowering Period: Feb-May

Status: none Notes: none

Family: Rosaceae

Scientific Name: Potentilla anserina ssp. pacifica

Common Name: Pacific silverweed Location: **POCH -** Marsh, high-tide zone

Habitat Type: Brackish Marsh

Growth Form: Herb

Flowering Period: April-May

Status: Ua2 - More than 2 localities known in the East Bay, but seriously threatened

Notes: none

Family: Rosaceae

Scientific Name: Potentilla glandulosa ssp. glandulosa

Common Name: Sticky cinquefoil

Location: JOMU - Wanda: SW, Riparian, densely shaded forest;

EUON - East side forest, Riparian

Habitat Type: Riparian Growth Form: Herb

Flowering Period: May-June

Scientific Name: Prunus armeniaca

Common Name: Apricot

Location: JOMU - Wanda: SE, relict orchard on SE facing slope, with scattered

remaining trees; House: Orchard; Grave: Orchard; EUON - Orchard

Habitat Type: Orchard/Grassland

Growth Form: Tree

Flowering Period: Feb-April

Status: none

Notes: all apricot trees are planted, some historic, some representation

Family: Rosaceae

Scientific Name: *Prunus avium* Common Name: Sweet cherry

Location: **JOMU** - House: Single tree in orchard, behind visitor center near north fence

west of peaches

Habitat Type: Orchard Growth Form: Tree

Flowering Period: February-April

Status: none

Notes: planted, not historic

Family: Rosaceae

Scientific Name: *Prunus cerasifera* Common Name: Cherry plum

Location: **JOMU -** Wanda: All quadrants, scattered in shaded and open areas. House:

near garden areas. Grave: Orchard, ruderal:

EUON - East side forest, slide area

Habitat Type: Ruderal/Forest/Woodland

Growth Form: Tree

Flowering Period: Feb-April

Status: CalEPPC-N

Notes: several relict individuals as well as seedlings and saplings.

Family: Rosaceae

Scientific Name: Prunus domestica

Common Name: Plum

Location: **JOMU** - House: Plum orchard west of Muir house from Giant Sequoia to

south fence; EUON - Orchard north of Tao house

Habitat Type: Orchard Growth Form: Tree

Flowering Period: Feb-April

Scientific Name: *Prunus dulcis* Common Name: Almond

Location: **JOMU -** Wanda: NE, at entrance of main trail; House: North of carriage

house

Habitat Type: Orchard/Ruderal

Growth Form: Tree

Flowering Period: Feb-April

Status: none

Notes: planted and feral, representation of historic

Family: Rosaceae

Scientific Name: *Prunus lyonii* Common Name: Catalina cherry

Location: **JOMU** - House: One existing tree in native plants garden

Habitat Type: Garden Growth Form: Tree

Flowering Period: April-May

Status: none

Notes: Planted, not historic

Family: Rosaceae

Scientific Name: Prunus persica

Common Name: Peach

Location: JOMU - House: Orchard on north side of site; Grave: Orchard

Habitat Type: Orchard Growth Form: Tree

Flowering Period: April-May

Status: none

Notes: part of historic orchard

Scientific Name: *Prunus salicina* Common Name: Japanese plum

Location: JOMU - House: Plum orchard west of Muir house from Giant Sequoia to

south fence

Habitat Type: Orchard Growth Form: Tree

Flowering Period: April-May

Status: none

Notes: planted, not historic

Scientific Name: Pyracantha angustifolia

Common Name: Firethorn

Location: **JOMU -** Wanda: NE, on trail, just west of train trestle

Habitat Type: Ruderal Growth Form: Shrub

Flowering Period: April-May

Status: CalEPPC-N

Notes: single plant, does not appear to be spreading

Family: Rosaceae

Scientific Name: Pyracantha coccinea

Common Name: Firethorn

Location: JOMU - House: Between Adobe and Ramada

Habitat Type: Garden Growth Form: Shrub

Flowering Period: April-May

Status:

Notes: single plant, does not appear to be spreading, planted, not historic

Family: Rosaceae

Scientific Name: *Pyrus communis* Common Name: Common pear

Location: **JOMU** – Wanda: Single old tree next to barn on Strain Ranch; House:

Orchard west of Franklin creek, west of carriage house; Grave: Orchard

Habitat Type: Orchard Growth Form: Tree

Flowering Period: March-May

Status: none

Notes: Historic orchard.

Family: Rosaceae

Scientific Name: *Rhaphiolepis indica* Common Name: Indian hawthorn

Location: JOMU - House: Retained in non-historic area

Habitat Type: Garden Growth Form: Shrub

Flowering Period: Spring and Fall

Status: none

Notes: planted, not historic

Scientific Name: *Rosa banksiae* Common Name: Lady banks rose

Location: **JOMU -** House: Adobe garden

Habitat Type: Garden Growth Form: Shrub Flowering Period: Spring

Status: none

Notes: planted, historic

Family: Rosaceae

Scientific Name: *Rosa californica* Common Name: California rose

Location: **JOMU -** House: Riparian, next to bridge; Grave: Riparian

Habitat Type: Riparian Growth Form: shrub

Flowering Period: April-June

Status: none Notes: none

Family: Rosaceae

Scientific Name: *Rosa gymnocarpa* Common Name: Dwarf rose, Wood rose

Location: **JOMU -** Wanda: SE-NW, on shaded forest slopes

Habitat Type: Forest Growth Form: Shrub

Flowering Period: March-April

Status: none Notes: none

Family: Rosaceae

Scientific Name: Rosa harisonii

Common Name: Harison's yellow rose

Location: **JOMU** - House: Near southwest corner of Muir house lawn, outside oval

Habitat Type: Garden Growth Form: Shrub Flowering Period: Spring

Status: none

Notes: planted, maybe historic

Scientific Name: *Rosa laevigata* Common Name: Cherokee rose

Location: **JOMU** - House: Next to back fence near southwest corner of Adobe

Habitat Type: Garden Growth Form: Shrub Flowering Period: Spring

Status: none

Notes: planted, historic, Muir favorite

Family: Rosaceae

Scientific Name: *Rosa* sp. Common Name: Rose

Location: **JOMU -** House: Rose garden in oval north of Muir house

Habitat Type: Garden Growth Form: Shrub Flowering Period: Spring

Status: none

Notes: planted, not historic

Family: Rosaceae

Scientific Name: *Rubus discolor* Common Name: Himalaya blackberry

Location: **JOMU -** Wanda: NE, single clump at edge of field near maintenance; House:

Fencelines, riparian; Grave: Riparian, orchard edge; EUON - East slide area

Habitat Type: Ruderal/Riparian/Forest

Growth Form: Shrub

Flowering Period: March-July

Status: CalEPPC-A1

Notes: none

Family: Rosaceae

Scientific Name: *Rubus ursinus*Common Name: California blackberry

Location: **JOMU -** Wanda: All quadrants, along creeks and ruderal areas; Grave:

Riparian. EUON - East side slide area

Habitat Type: Riparian/Forest

Growth Form: Shrub

Flowering Period: March-May

Scientific Name: *Spirea prunifolia* Common Name: Bridal wreath spirea

Location: JOMU - House: Garden in front of Adobe

Habitat Type: Garden Growth Form: Shrub

Flowering Period: March-May

Status: none

Notes: Planted, historic, absent at time of survey, but will be replanted

Family: Rubiaceae

Scientific Name: *Galium aparine* Common Name: Goosegrass

Location: JOMU - Wanda: Ubiquitous; House: ubiquitous; Grave: Ubiquitous;

EUON - Ubiquitous

Habitat Type: All Habitats

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Rubiaceae

Scientific Name: *Galium murale* Common Name: Tiny bedstraw

Location: **JOMU -** Wanda: NE, between tracks and maintenance, probably elsewhere;

EUON - NE, finger of grassland between two stretches of forest

Habitat Type: Grassland/Ruderal

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Rubiaceae

Scientific Name: Galium porrigens var. porrigens

Common Name: Bedstraw

Location: **JOMU -** Wanda: All quadrants, in shaded areas;

EUON - East side forest area

Habitat Type: Woodland/Forest

Growth Form: Herb

Flowering Period: March-May

Family: Rubiaceae

Scientific Name: *Sherardia arvensis* Common Name: Field madder

Location: **EUON -** NE, finger of grassland between forest habitats

Habitat Type: Grassland Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Rutaceae

Scientific Name: Citrus limon Common Name: Lemon

Location: **JOMU** - House: One tree near southeast corner of Muir house, Lemon

orchard in southwest corner of site

Habitat Type: Garden/Orchard Growth Form: Small tree

Flowering Period: Year round producer

Status: none

Notes: Planted, not historic

Family: Rutaceae

Scientific Name: Citrus sinensis

Common Name: Orange

Location: **JOMU** - House: One tree directly behind Muir house, southeast corner,

Orange grove east of Adobe

Habitat Type: Garden/Orchard Growth Form: Small tree

Flowering Period: Winter/Spring

Status: none

Notes: Planted, not historic

Family: Rutaceae

Scientific Name: Ptelea crenulata

Common Name: Hop tree

Location: **JOMU** - Wanda: NW-NE-SE, occasional shrub/small tree on forest and

woodland margins

Habitat Type: Woodland/Forest Growth Form: Shrub/Small tree Flowering Period: April-May

Status: Ub - 3-5 localities known in East Bay

Notes: More common than believed - occurs on Chaparral/Forest ecotones

Family: Salicaceae

Scientific Name: Populus fremontii ssp. fremontii

Common Name: Fremont cottonwood

Location: **JOMU -** Wanda: SE, edge of Strain property;

Habitat Type: Riparian/Ruderal

Growth Form: Tree

Flowering Period: March-May

Status: none Notes: none

Family: Salicaceae

Scientific Name: *Salix laevigata* Common Name: Red willow

Location: **JOMU -** Wanda: NW corner of NW quadrant, above tracks; House: Riparian

Grave: Riparian
Habitat Type: Riparian/Ruderal

Growth Form: Tree

Flowering Period: March-June

Status: none Notes: none

Family: Salicaceae

Scientific Name: *Salix lasiolepis* Common Name: Arroyo willow

Location: **JOMU -** Wanda: NW-NE, Dry North-facing slope above tracks; House:

Riparian; Grave: Riparian; EUON - East side next to office, slide area

Habitat Type: Riparian/Ruderal

Growth Form: Tree

Flowering Period: May-June

Status: none Notes: none

Family: Saxifrigaceae

Scientific Name: *Bergenia crassifolia* Common Name: Winter blooming bergenia

Location: **JOMU -** House: East bed of Muir house

Habitat Type: Garden Growth Form: Herb Flowering Period: Winter

Status: none Notes: planted Family: Saxifrigaceae

Scientific Name: Carpenteria californica

Common Name: Bush anemone

Location: **JOMU -** House: Native plant garden

Habitat Type: Garden Growth Form: shrub Flowering Period: Spring

Status: none

Notes: planted; Native to California Sierra Nevadas, but not locally native

Family: Saxifrigaceae

Scientific Name: Deutzia scabra

Common Name: Deutzia

Location: **JOMU** - House: victorian garden and adobe

Habitat Type: Garden Growth Form: shrub Flowering Period: May

Status: none

Notes: planted, not historic

Family: Saxifrigaceae

Scientific Name: *Heuchera micrantha* Common Name: Alum root, Coral bells

Location: **JOMU** - House: Behind Adobe, south side

Habitat Type: Garden Growth Form: herb Flowering Period: spring

Status: none

Notes: planted, not historic

Family: Saxifragaceae

Scientific Name: *Hydrangea macrophylla* Common Name: Big leaf hydrangea

Location: JOMU - House: North bed at visitor center

Habitat Type: Garden Growth Form: Herb Flowering Period: Spring

Status: none

Notes: Planted, not historic

Family: Saxifragaceae

Scientific Name: *Lithophragma affine* Common Name: Common woodland star

Location: **JOMU -** Wanda: All quadrants in woodland and sometimes open grassland;

Habitat Type: Woodland/Grassland

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Saxifragaceae

Scientific Name: Lithophragma heterophyllum

Common Name: Hillside woodland star

Location: **JOMU -** Wanda: NW, in shaded woodland;

EUON - East forest, slide area

Habitat Type: Woodland/Forest

Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Saxifragaceae

Scientific Name: *Saxifraga californica* Common Name: California saxifrage

Location: JOMU - Wanda: NW, in shaded woodland

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-May

Status: none Notes: none

Family: Scrophulariaceae

Scientific Name: Bellardia trixago

Common Name: Bellardia

Location: **JOMU -** Wanda: All quadrants, on roads

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: April-June

Status: CalEPPC-B

Notes: none

Scientific Name: Castilleja affinis ssp. affinis

Common Name: Indian paintbrush

Location: **JOMU** - Wanda: NW-NE, Chaparral, dry, exposed areas

Habitat Type: Chaparral Growth Form: sub-shrub Flowering Period: April-June

Status: none Notes: none

Family: Scrophulariaceae

Scientific Name: *Castilleja attenuata* Common Name: Valley tassels

Location: **JOMU -** Wanda: NE-SE, along roads and paths;

Habitat Type: Woodland/Ruderal

Growth Form: herb

Flowering Period: March-May

Status: none Notes: none

Family: Scrophulariaceae

Scientific Name: Castilleja exserta ssp. exserta

Common Name: Purple owl's clover

Location: **JOMU** - Wanda: NE-NE, on woodland hillsides, potentially in south as well

Habitat Type: Woodland Growth Form: herb

Flowering Period: March-May

Status: none Notes: none

Family: Scrophulariaceae

Scientific Name: *Castilleja foliolosa* Common Name: Woolly owl's clover

Location: **JOMU** - Wanda: NW-NE, on exposed slopes in chaparral

Habitat Type: Chaparral Growth Form: sub-shrub Flowering Period: Feb-May

Scientific Name: Castilleja rubicundula ssp. lithospermoides

Common Name: Cream sacs

Location: JOMU - Wanda: NE, two populations in grassy openings in woodland, below

wildflower trail between makers 3 and 4

Habitat Type: Woodland Growth Form: herb

Flowering Period: April-June

Status: Ub - 3-5 localities known in East Bay

Notes: none

Family: Scrophulariaceae

Scientific Name: *Collinsia heterophylla* Common Name: Purple chinese houses

Location: **JOMU -** Wanda: NW-NE, Along roads and trails, potentially in south too

Habitat Type: Woodland Growth Form: herb

Flowering Period: April-May

Status: none Notes: none

Family: Scrophulariaceae

Scientific Name: Collinsia sparsiflora var. sparsiflora

Common Name: Blue-eyed mary

Location: JOMU - Wanda: NE, woodland hillsides

Habitat Type: Woodland Growth Form: herb

Flowering Period: April-May

Status: Ub - 3-5 localities known in East Bay

Notes: none

Family: Scrophulariaceae

Scientific Name: Kickxia elatine

Common Name: Fluellin

Location: **JOMU -** House: Fields, vineyard, orchards

Habitat Type: Ruderal/Orchard

Growth Form: herb

Flowering Period: May-July

Scientific Name: *Linaria canadensis*

Common Name: Blue toadflax

Location: **JOMU -** Wanda: NE, one patch in chaparral

Habitat Type: Chaparral Growth Form: herb

Flowering Period: April-May

Status: 3-5 localities known in East Bay

Notes: none

Family: Scrophulariaceae

Scientific Name: *Mimulus aurantiacus* Common Name: Sticky monkeyflower

Location: **JOMU -** Wanda: NW, NE, in chaparral;

EUON - East side slide area

Habitat Type: Chaparral/Forest

Growth Form: Shrub

Flowering Period: April-July

Status: none Notes: none

Family: Scrophulariaceae

Scientific Name: Scrophularia californica ssp. californica

Common Name: Figwort

Location: **JOMU** - Wanda: SW, along creek, probably elsewhere as well; Grave:

Riparian; EUON - East side slide area

Habitat Type: Riparian/Forest

Growth Form: herb

Flowering Period: March-April

Status: none Notes: none

Family: Scrophulariaceae

Scientific Name: *Triphysaria pusilla* Common Name: Dwarf owl's clover

Location: **JOMU -** Wanda: All quadrants, along roads

Habitat Type: Ruderal Growth Form: herb

Flowering Period: March-May

Scientific Name: *Veronica persica* Common Name: Persian speedwell

Location: **JOMU -** Wanda: SW, on road; Grave: Orchard;

EUON - Ruderal, disked areas

Habitat Type: Ruderal Growth Form: herb

Flowering Period: March-May

Status: none Notes: none

Family: Simaroubiaceae

Scientific Name: *Ailanthus altissima* Common Name: Tree of heaven

Location: JOMU - Wanda: NE-SE, many still persisting along hillsides above road and

below train tracks

Habitat Type: Ruderal/Woodland

Growth Form: Tree

Flowering Period: May-July

Status: CalEPPC-A2

Notes: none

Family: Solanaceae

Scientific Name: *Nicotiana glauca* Common Name: Tree tobacco

Location: **JOMU** - House: To west of easy access path above apple orchard

Habitat Type: Garden Growth Form: Shrub Flowering Period: Spring

Status: none

Notes: Planted, not historic

Family: Solanaceae

Scientific Name: *Solanum americanum* Common Name: Common nightshade

Location: **JOMU -** NW, forest just above train tracks; Grave: Riparian

EUON - East slide area

Habitat Type: Forest Growth Form: Shrub-Vine Flowering Period: June-August

Status: NOX-Non Rated

Notes: none

Family: Solanaceae

Scientific Name: *Solanum umbelliferum* Common Name: Blue-witch nightshade

Location: **JOMU -** Wanda: NE, in chaparral, and SW, riparian;

EUON - East slide area

Habitat Type: Chaparral/Forest/Riparian

Growth Form: Shrub-Vine Flowering Period: March-June

Status: none Notes: none

Family: Sterculiaceae

Scientific Name: Fremontodendron californica

Common Name: Flannel bush

Location: **JOMU -** House: Native plant garden west of Franklin Creek

Habitat Type: Garden Growth Form: Shrub Flowering Period: spring

Status: none

Notes: Planted, not historic

Family: Tamariaceae

Scientific Name: Tamarix gallica

Common Name: Tamarisk

Location: JOMU - House: Along main road east of Giant Sequoia

Habitat Type: Garden Growth Form: Tree

Flowering Period: Summer

Status: none

Notes: Planted, Historic

Family: Taxodiaceae

Scientific Name: Sequoia sempervirens

Common Name: Coast redwood

Location: **JOMU -** Wanda: NE, in main parking area; House: Grove located on east side

of Franklin creek, near south border of park; **EUON** - above pool

Habitat Type: Garden/Ruderal

Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, not occurring here naturally.

Family: Taxodiaceae

Scientific Name: Sequoiadendron giganteum

Common Name: Giant sequoia

Location: JOMU - House: Across from carriage house; Grave: relict ornamental tree

Habitat Type: Orchard Growth Form: Tree Flowering Period: N/A

Status: none

Notes: Planted, Historic. Also planted at EUON.

Family: Thymelaeaceae

Scientific Name: Daphne odora Common Name: Winter daphne

Location: **JOMU -** House: Adobe garden

Habitat Type: Garden Growth Form: shrub Flowering Period: winter

Status: none Notes: Planted

Family: Typhaceae

Scientific Name: *Typha angustifolia* Common Name: Narrow-leafed cattail

Location: JOMU - Wanda: NE, along tracks, below hill cut

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-July

Status: none Notes: none

Family: Typhaceae

Scientific Name: *Typha latifolia*Common Name: Broad-leafed cattail
Location: **EUON** - East slide area

Habitat Type: Forest Growth Form: Herb

Flowering Period: May-July

Family: Ulmaceae

Scientific Name: *Ulmus pumila* Common Name: Siberian elm

Location: **JOMU** - House: At well by parking lot, and by oval

Habitat Type: Garden Growth Form: Tree Flowering Period: n/a

Status: none

Notes: Planted, not historic

Family: Urticaceae

Scientific Name: *Urtica dioica ssp. holosericea* Common Name: Stinging nettle, Hoary nettle

Location: **JOMU -** House: Riparian; Grave: Riparian;

EUON - East slide area

Habitat Type: Forest/Riparian

Growth Form: Herb

Flowering Period: June-Aug

Status: none Notes: none

Family: Urticaceae

Scientific Name: *Urtica urens* Common Name: Dwarf nettle

Location: **JOMU** - Wanda: NW-NE, shaded forest, potentially in the south as well;

EUON - Ruderal, NW

Habitat Type: Forest/Ruderal

Growth Form: Herb

Flowering Period: June-Aug

Status: none Notes: none

Family: Valerianaceae

Scientific Name: *Centranthus ruber* Common Name: Red valerian

Location: JOMU - House: Adobe Garden

Habitat Type: Garden Growth Form: Herb

Flowering Period: Spring-Summer

Status: CalEPPC-?

Notes: none

Jepsen & Murdoch 2002

Family: Valerianaceae

Scientific Name: *Plectritis brachystemon* Common Name: Short-spurred plectritis

Location: **JOMU** - Wanda: NE-NW, along trails and deer tracks, usually in moist areas

(very commonly found with Collinsia)

Habitat Type: Woodland Growth Form: Herb

Flowering Period: April-May

Status: none Notes: none

Family: Valerianaceae

Scientific Name: *Plectritis ciliosa ssp. ciliosa* Common Name: Long-spurred plectritis

Location: **JOMU** - Wanda: NW, along steep hillside near fence line, open woodland

Habitat Type: Woodland Growth Form: Herb

Flowering Period: March-April

Status: none Notes: none

Family: Verbenaceae

Scientific Name: Phyla nodiflora var. nodiflora

Common Name: Common lippia

Location: **JOMU** - House: Lawn weed near house;

EUON - Lawn weed near Tao House

Habitat Type: Ruderal Growth Form: Herb

Flowering Period: May-July

Status: CalEPPC-N

Notes: none

Family: Viscaceae

Scientific Name: Phoradendron macrophyllum

Common Name: Big-leaf mistletoe

Location: **JOMU -** Wanda: NE, in English walnut trees below train tracks; House:

Orchard trees; EUON - West walnut orchard

Habitat Type: Orchard/Woodland

Growth Form: Parasite Flowering Period: N/A

Status: Ub - 3-5 localities known wild in the East Bay

Notes: Typically grows in cultivated fruit trees, uncommon elsewhere

Family: Viscaceae

Scientific Name: Phoradendron villosum

Common Name: Oak mistletoe

Location: **JOMU -** Wanda: All quadrants, common oak parasite;

EUON - East forest

Habitat Type: Woodland/Forest

Growth Form: Parasite Flowering Period: N/A

Status: none

Notes: Typically grows in native *Quercus* spp.

Family: Vitaceae

Scientific Name: Vitis vinifera

Common Name: Grape

Location: **JOMU** - Wanda: In SE corner of property near stables, on fence; House: in

vineyard between plum orchard and Franklin creek;

EUON - West walnut orchard, growing in the crook of a Walnut tree

Habitat Type: Orchard/Ruderal

Growth Form: Vine Flowering Period: N/A

Status: none

Notes: Planted, not historic, but representation

Family: Zygophyllaceae

Scientific Name: *Tribulus terrestris* Common Name: Puncturevine

Location: **JOMU** - Wanda: NE, main parking area; House: Orchards; Grave; Orchard;

EUON - Orchards, disked areas

Habitat Type: Orchard/Ruderal

Growth Form: Herb

Flowering Period: June-Aug

Status: NOX-C Notes: none

References

- The American Horticultural Society, 1990. <u>Encyclopedia of Garden Plants</u>, Macmillan Publishing Company, New York
- Arizona State University Herbarium Database. http://ces.asu.edu
- California Exotic Pest Plant Council, 1999. The CalEPPC List: Exotic Pest Plants of Greatest Ecological Concern in California. http://www.caleppc.org
- CalFlora Database. http://www.calflora.org
- Ertter, Barbara, 1997. <u>Annotated Checklist of the East Bay Flora</u>. California Native Plant Society, East Bay Chapter.
- Faber, Phyllis M, 1996. <u>Common Wetland Plants of Coastal California</u>. Pickleweed Press.
- Hickman, James, ed, 1993. <u>The Jepson Manual: Higher Plants of California</u>. University of California Press, Berkeley, CA.
- Hunter, John C. et al, 1993. The flora, vegetation, and human use of Mt. Wanda, John
 Muir National Historic Site, Martinez, California. Cooperative Park Studies Unit,
 National Park Service, Davis, California. Unpublished.
- Kozloff, Eugene and Beidleman, Linda, 1994. <u>Plants of the San Francisco Bay Region:</u>
 <u>Mendocino to Monterey.</u> Sagen Press.
- Lake, Dianne, 2001. <u>Unusual and Significant Plants of Alameda and Contra Costa</u>
 Counties. California Native Plant Society, East Bay Chapter.
- Lewis and Lewis, 1955. The genus *Clarkia*. University of California Publications in Botany 20: 241-392.
- San Francisco Bay Area Regional Database (BARD). http://bard.wr.usgs.gov/index.html Sunset Books, 1989. Western Garden Book, Lane Publishing Company.
- U.S. Fish & Wildlife Service, Sacramento Fish & Wildlife Office, <u>Plant Species of Concern</u>, Updated July 23, 2002
 http://sacramento.fws.gov/es/spp_lists/plant_sp_concern.cfm